

ORIGINAL



0000094250

MEMORANDUM

TO: Docket Control

FROM: Ernest G. Johnson  
Director  
*EJ* Utilities Division

DATE: March 03, 2009

RE: STAFF REPORT FOR APPALOOSA WATER COMPANY'S APPLICATIONS  
FOR A PERMANENT RATE INCREASE, DOCKET NO. W-03443A-08-0313 AND  
FINANCING APPROVAL, DOCKET NO. W-03443A-08-0177

Attached is the Staff Report for Appaloosa Water Company's, applications for a permanent rate increase and financing approval. Staff recommends approval of the rate case application using Staff's recommended rates and charges. Staff recommends approval of the financing application subject to Staff's recommendations.

Any party who wishes may file comments to the Staff Report with the Commission's Docket Control by 4:00 p.m. on or before March 12, 2009.

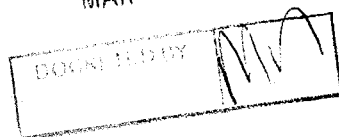
EGJ:CRM:kdh

Originator: Charles R. Myhlhousen

Attachment: Original and fifteen copies

Arizona Corporation Commission  
DOCKETED

MAR - 3 2009



ARIZONA CORPORATION COMMISSION  
DOCKET CONTROL

2009 MAR - 3 P 4:27

RECEIVED

Service List for: Appaloosa Water Company  
Docket Nos. W-03443A-08-0313 and W-03443A-08-0177

Mr. Joseph Cordovana  
Appaloosa Water Company  
7012 North 18<sup>th</sup> Street  
Phoenix, Arizona 85020

Ms. Janice M. Alward  
Chief Counsel, Legal Division  
Arizona Corporation Commission  
1200 West Washington Street  
Phoenix, Arizona 85007

Mr. Ernest G. Johnson  
Director, Utilities Division  
Arizona Corporation Commission  
1200 West Washington Street  
Phoenix, Arizona 85007

Ms. Lyn Farmer  
Chief Administrative Law Judge, Hearing Division  
Arizona Corporation Commission  
1200 West Washington Street  
Phoenix, Arizona 85007

**STAFF REPORT  
UTILITIES DIVISION  
ARIZONA CORPORATION COMMISSION**

**APPALOOSA WATER COMPANY**

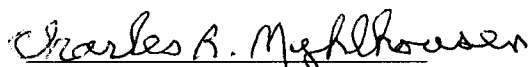
**DOCKET NO. W-03443A-08-0313, RATES  
AND  
DOCKET NO. W-03443A-08-0177, FINANCE**

**APPLICATIONS FOR A  
PERMANENT RATE INCREASE AND FINANCING APPROVAL**

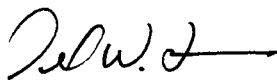
**MARCH 03, 2009**

### STAFF ACKNOWLEDGMENT

The Staff Report for Appaloosa Water Company, Docket Nos. W-03443A-08-0313 and W-03443A-08-0177, for a permanent rate increase and financing approval, respectively, was the responsibility of the Staff members listed below. Charles R. Myhlhousen was responsible for the review and analysis of the Company's applications recommended revenue requirements, rate base, rate design and financial analysis. Del Smith was responsible for the engineering and technical analysis. Carman Madrid was responsible for reviewing the Commission's records on the Company and reviewing customer complaints filed with the Commission.



Charles R. Myhlhousen  
Public Utility Analyst III



---

Del Smith  
Utilities Engineer



Carmen Madrid  
Public Utilities Consumer Analyst I

**EXECUTIVE SUMMARY  
APPALOOSA WATER COMPANY  
DOCKET NOS. W-03443A-08-0313  
AND W-03443A-08-0177**

Appaloosa Water Company ("Company") serves the Appaloosa Meadows subdivision within the Town of Chino Valley, Arizona. The Company is engaged in the business of providing utility water service exclusively to Arizona customers in Yavapai County. The Company provides service to approximately 237 customers. The Company's current rates were effective April 1, 1998. This is the first rate case and long term financing case filed by the Company since the Certificate of Convenience and Necessity was issued in Decision No. 60733, March 23, 1998. The Company is a Class C utility.

The Company, in its rate application, requested an increase in revenue of \$162,489 or a 100.0 percent increase over test year revenue of \$162,489. The Company is proposing revenues of \$324,978 that results in an operating income of \$161,095, for an operating margin of 49.57 percent. The Company's requested rates would increase the typical residential bill with a median usage of 6,253 gallons from \$38.13 to \$76.27, for an increase of \$38.14 or 100.0 percent.

Staff is recommending no increase or decrease over Staff's adjusted test year revenue of \$142,873. Staff's recommended revenues of \$142,873, result in an operating income of \$24,474, for an operating margin of 17.13 percent. Staff's recommended rates would decrease the typical residential bill with a median usage of 6,253 gallons from \$38.13 to \$36.01, for a decrease of \$2.12 or 5.6 percent. This decrease is caused by Staff's redesign of rates to an inverted 3-tier commodity rate structure.

The Company, in its financing application, is requesting approval of \$192,300 of long term financing. The Company has also submitted an application to the Water Infrastructure Finance Authority of Arizona ("WIFA").

Staff recommends approval of financing in the amount of \$200,000.

Staff's recommended rates and charges would continue to provide an operating income of \$24,474 for an operating margin of 17.13 percent. The operating margin is within Staff's recommended range for operating margin.

Staff recommends:

- Approval of Staff's rates and charges as shown on Schedule CRM-4. In addition to collection of its regular rates and charges, the Company may collect from its customers the proportionate share of any privilege, sales or use tax per Commission Rule (14-2-409D-5).

- The Company be ordered to docket a tariff of its approved rates and charges within 30 days after the Decision in this matter is issued.
- The Company be ordered to use the depreciation rates delineated in Table B of the Engineering Report on a going forward basis.
- That the lease agreement on the well be cancelled.
- That \$200,000 finance request be approved.
- That the loans made to Joe Cordovana be substantiated with a written note and board approval and that Joe Cordovana pay back the loan in a timely manner.
- Approval of an arsenic cost recovery mechanism to provide recovery of arsenic remediation as described in this Report.
- That this docket remain open to facilitate implementation of an arsenic cost recovery mechanism.
- That the Company be required to report the actual water pumped data as read at the well meter on a monthly basis in future Annual Reports, beginning with the 2008 Annual Report filed in 2009.
- That the Company monitor the Appaloosa water system and submit the gallons pumped and sold to determine the non-account water for one full year. The Company should coordinate when it reads the well meters each month with customer billing so that an accurate accounting is determined. The results of this monitoring and reporting shall be docketed as a compliance item in this case within 13 months of the effective date of the order issued in this proceeding. If the reported water loss is greater than 10 percent the Company shall prepare a report containing a detailed analysis and plan to reduce water loss to 10 percent or less. If the Company believes it is not cost effective to reduce the water loss to less than 10 percent, it should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted, shall be docketed as a compliance item within 13 months of the effective date of the order issued in this proceeding.
- That the Company's filed backflow prevention tariff be approved. Staff further recommends that the Company file the tariff with Docket Control, as a compliance item in this docket, within 45 days after the effective date of the decision in this case.
- That the Company file with Docket Control, as a compliance item in this docket, the Certificate of AOC issued by ADEQ or Yavapai County for the waterline extension across Road 4 North at Harrison Drive by December 31, 2009.

## TABLE OF CONTENTS

	<u>PAGE</u>
<b>FACT SHEET .....</b>	<b>1</b>
<b>CURRENT RATES: .....</b>	<b>1</b>
RATES: .....	1
FINANCE: .....	1
CUSTOMERS: .....	1
NOTIFICATION: .....	2
COMPLAINTS: .....	2
<b>SUMMARY OF FILING .....</b>	<b>2</b>
<b>COMPANY BACKGROUND .....</b>	<b>2</b>
<b>CONSUMER SERVICES: .....</b>	<b>3</b>
<b>COMPLIANCE: .....</b>	<b>3</b>
<b>RATE BASE: .....</b>	<b>3</b>
PLANT-IN-SERVICE: .....	4
ACCUMULATED DEPRECIATION: .....	4
ADVANCES-IN-AID-OF-CONSTRUCTION: .....	4
CONTRIBUTIONS-IN-AID-OF-CONSTRUCTION: .....	4
<b>OPERATING REVENUE: .....</b>	<b>4</b>
<b>OPERATING EXPENSES: .....</b>	<b>5</b>
<b>REVENUE REQUIREMENT .....</b>	<b>6</b>
<b>OPERATING INCOME: .....</b>	<b>6</b>
<b>OPERATING MARGIN: .....</b>	<b>6</b>
<b>RATE DESIGN .....</b>	<b>6</b>
<b>FINANCING: .....</b>	<b>8</b>
<b>STAFF RECOMMENDATIONS .....</b>	<b>9</b>

## **SCHEDULES**

Revenue Requirement .....	Schedule CRM-1
Gross Revenue Conversion Factor .....	Schedule CRM-2
Rate Base-Original Cost.....	Schedule CRM-3
Summary Of Rate Base Adjustment .....	Schedule CRM-4
Rate Base Adjustment # 1 .....	Schedule CRM-5
Rate Base Adjustment # 2 .....	Schedule CRM-6
Operating Income .....	Schedule CRM-7
Summary Of Operating Income Adjustments .....	Schedule CRM-8
Operating Income Adjustment #1 Metered Water Revenues .....	Schedule CRM-9
Operating Income Adjustment # 2 Wages And Salaries Expense .....	Schedule CRM-10
Operating Income Adjustment #3 Repairs And Maintenance Expense .....	Schedule CRM-11
Operating Income Adjustment #4 Outside Services Expense .....	Schedule CRM-12
Operating Income Adjustment #5 Water Testing Expense.....	Schedule CRM-13
Operating Income Adjustment #6 Depreciation Expense .....	Schedule CRM-14
Operating Income Adjustment # 7 Taxes Other Than Income .....	Schedule CRM-15
Operating Income Adjustment # 8 Property Taxes .....	Schedule CRM-16
Operating Income Adjustment # 9 Income Taxes.....	Schedule CRM-17
Rate Design.....	Schedule CRM-18
Typical Bill Analysis .....	Schedule CRM-19

## **ATTACHMENT**

Engineering Report .....	A
Arsenic Cost Recovery Schedules .....	B



**Fact Sheet**

**Current Rates:** Decision No. 60733, March 23, 1998, rates effective April 1, 1998.

**Type of Ownership:** Arizona "C" Corporation.

**Location:** The Company serves the Appaloosa Meadows subdivision within the Town of Chino Valley in Yavapai County. The Company Certificate of Convenience and Necessity ("CC&N") covers approximately two-thirds of a square mile. The Company also serves contiguous parcels covering roughly 60 acres north of its CC&N.

**Rates:**

Permanent rate increase application filed: June 20, 2008, amended July 29, 2008, August 7, 2008 and September 17, 2008.

**Finance:** The finance application was filed March 26, 2008.

**Test Year:** Current Test Year Ended: December 31, 2007.

	<u>Company Current Rates</u>	<u>Company Proposed Rates</u>	<u>Staff Recommended Rates</u>
Monthly Minimum Charge Based on 5/8 X 3/4 inch meter	\$25.00	\$50.00	\$25.00
Gallons in Minimum	1	1	0
Commodity Charge Excess of minimum, per 1,000 gallons	2.50	5.00	
Tier One zero gallons to 3,000 gallons			1.50
Tier Two 3,001 gallons to 7,000 gallons			2.00
Tier Three All gallons over 7,000 gallons			2.90
Typical residential bill (Based on median usage of 6.253 gallons)	\$38.13	\$76.27	36.01

**Customers:**

The average number of customers in current test year is 237.

**Notification:**

Customer Notification was mailed originally on June 18, 2008, corrected and resent on June 30, 2008.

**Complaints:**

There were four complaints from 01/01/2006 through 01/27/2009.

**Summary of Filing**

Based on adjusted test year results, Appaloosa Water Company ("Company") realized an operating income of \$24,474, for a 17.13 percent operating margin as shown on Schedule CRM-1.

The Company's proposed rates produce operating revenue of \$324,978 and an operating income of \$161,095, for an operating margin of 49.57 percent. The Company's proposed rates increase the typical residential bill, with a median usage of 6,253 gallons, from \$38.13 to \$76.27, for an increase of \$38.14 or 100.0 percent.

Staff's recommended rates produce operating revenue of \$142,873 and an operating income of \$24,474, for an operating margin of 17.13 percent. Staff's recommended rates decrease the typical residential bill, with a median usage of 6,253 gallons, from \$38.13 to \$36.01, for a decrease of \$2.12 or 5.6 percent. This decrease is caused by Staff's redesign of rates to an inverted 3-tier commodity rate structure.

The Company is a class C utility, based on its proposed rates. Based on Staff's proposed rates, the Company is a Class D.

**Company Background**

The Commission granted the Company its Certificate of Convenience and Necessity ("CC&N") in Decision No. 60733, dated March 23, 1998. This is the Company's first rate application since the Company received its CC&N in 1998. The present owner, Artesian Holdings L.L.C., purchased the Company in 2006.

On June 20, 2008, the Company filed an application for a permanent rate increase with the Commission. On July 21, 2008, the Company's filing was found deficient. On July 29, 2008, August 7, 2008, and September 17, 2008, the Company submitted the items to correct the deficiencies. On October 17, 2008, Staff determined the application was sufficient. The Company's current test year ends on December 31, 2007.

The Company filed a financing application on March 27, 2008. Staff filed a motion to consolidate the rate and financing applications on October 21, 2008. A Procedural Order dated December 5, 2008, granted Staff's motion to consolidate the two applications.

**Consumer Services:**

A review of the Commission's records from January 1, 2006, through January 27, 2009, revealed that there were four customer complaints. Three complaints for quality of service and one for a rate case item. All complaints have been resolved and closed.

**Compliance:**

A check with the Utilities Division Compliance Section showed no outstanding compliance issues.

The Company is current in its property and sales tax payments.

The Company is in good standing with the Corporations Division of the Commission.

The Company's service area is located within the Prescott Active Management Area ("AMA"). The Company is in compliance with AMA reporting requirements and Arizona Department of Water Resources requirements governing water providers and/or community water system.

According to the May 9, 2008 Arizona Department of Environmental Quality ("ADEQ") Compliance Status Report, the system has major deficiencies in monitoring and reporting requirements for arsenic. The system's running annual average has exceeded the maximum contaminate level ("MCL") for arsenic. ADEQ cannot determine if this system is currently delivering water that meets water quality standards required by Arizona Administrative Code, title 18, Chapter 4 because of these monitoring and reporting deficiencies.

**Rate Base:**

The Company's application indicates a rate base in the amount of \$679,726.

The Company could not verify the cost of plant items or obtain the invoices for the plant items added since 1998. The Company has Advances in Aid of Construction ("AIAC") in the amount of \$570,318. Since the Company could not verify who paid for these plant items, Staff has classified the balance of plant in service as Contributions in Aid of Construction ("CIAC") in the amount of \$759,327. Staff also made an adjustment of \$24,502 for CIAC amortization. Staff's adjustment decreases rate base by \$734,825, from \$679,726 to a negative \$55,099. See Schedule CRM-3.

**Plant-in-Service:**

Staff did not make any adjustments to plant in service. Staff agrees with the Company's plant in service amount of \$1,329,645 less accumulated depreciation of \$79,601. Staff's recommended net plant in service is \$1,250,044. The Company has a leased well that is not connected to the Company's water system. This well is not used by the Company. It is only leased in the event the Company has an emergency. This well is not included in plant in service. Staff recommends cancellation of the lease agreement for this well. The well is not used or useful. The owner of the well, Artesian Holdings L.L.C., pays all expenses and costs incurred by the well. See Schedules CRM-3 and CRM-4.

**Accumulated Depreciation:**

Staff concurs with the Company's accumulated depreciation of \$79,601.

Staff calculated accumulated depreciation by adding depreciation expense for the years 1998 through the end of 2007, to the Commission accumulated depreciation balance and subtracting accumulated depreciation for plant retirements from the Commission accumulated depreciation balance. This produces accumulated depreciation of \$79,601. See Schedule CRM-4.

**Advances-in-Aid-of-Construction:**

Staff made no adjustments to advances-in-aid-of-construction ("AIAC").

**Contributions-in-Aid-of-Construction:**

The Company is not claiming contributions-in-aid-of-construction ("CIAC"). Staff recommends CIAC in the amount of \$759,327. This amount represents the amount of plant where the Company could not verify amount paid. Staff made an adjustment of \$24,502 for CIAC amortization. See Schedule CRM-14.

**Operating Revenue:**

The Company's application requests operating revenue of \$162,489. Staff made an adjustment to metered water revenue, decreasing operating revenue by \$19,616 from \$161,635 to \$142,019. The Company made a year end general ledger adjustment to metered water revenue of \$19,616; increasing metered water revenue by this amount. This adjustment should not have been made to metered water revenue. This should have been a prior period adjustment for advances in aid of construction in order to bring that account in balance to actual AIAC. Staff's adjusted operating revenue and the bill counts reconcile. See Schedules CRM-7, CRM-8 and CRM-9.

The plant nursery, the clubhouse and Joe Cordovana's personal residence all have separate domestic water wells and are not connected to, or receiving, water from the Company.

**Operating Expenses:**

Staff's adjustments to operating expenses result in a decrease of \$45,483 from \$163,883 to \$118,400 as shown on Schedule CRM-7 and CRM-8. Adjustments are discussed below.

Adjustment 2: decreases wages and salaries expense by \$2,491 from \$45,730 to \$43,239 to reflect Staff's analysis of wages and salaries. Staff allowed the salary paid to Tara Tangeman and the amount of salary stated in Joe Cordovana's employment contract with the Company. See Schedules CRM-7, CRM-8, and CRM-10.

Adjustment 3: decreases repairs and maintenance expense by \$5,269 from \$8,226 to \$2,957 to remove the costs of one time expenses that will not be repeated in the near future and removal of the cost of plant pavers for future plant use. See Schedule CRM-11.

Adjustment 4: decreases outside services expense by \$19,861 from \$30,589 to \$10,728 to reflect Staff's recommended expense level. Staff removed expenses will not be repeated in the near future. Staff reclassified \$1,433 from water testing expense to reflect an increase in the certified operator expense. This adjustment reflects the normalized annual water testing costs determined per Staff's Engineering Report at Table A. See Schedule CRM-12.

Adjustment 5: decreases water testing expense by \$1,433 from \$3,012 to \$1,579. This adjustment reflects the normalized annual water testing costs determined per Staff's Engineering Report at Table A. Staff reclassified \$1,433 from water testing expense to outside services expenses. See schedule CRM-13.

Adjustment 6: decreases depreciation expense by \$21,471 from \$39,792 to \$18,321, to reflect the amount of depreciation expense for the test year less the amount offset by amortization of CIAC. See Schedules CRM-14.

Adjustment 7: decreases taxes other than income by \$1,471 from \$2,173 to \$702. Staff removed the annual sampling cost of \$746. Staff also removed the balance of sales taxes of \$725. See Schedule CRM- 15.

Adjustment 8: increases property taxes by \$38 from \$4,962 to \$5,030 to reflect the increased property taxes based on Staff's calculation of property taxes. See Schedules CRM-16.

Adjustment 9: increases income taxes by \$6,475 from zero to \$6,475 to reflect income taxes based on Staff's recommended operating revenue. See Schedules CRM-7, CRM-8 and CRM-17.

Staff's recommended rates and charges continue to provide an operating income of \$24,474 for an operating margin of 17.13 percent. This operating margin is within Staff's recommended range for operating margin. This operating income amount will give the Company sufficient cash for operating expenses and contingencies. See Schedule CRM-1.

### **Revenue Requirement**

The Company's current rates have been in effect since they have not been increased since the original CC&N was issued in 1998.

Staff recommends total operating revenue of \$142,873 which is the same as Staff's adjusted test year revenue of \$142,873. Staff's recommendation provides sufficient operating revenue. See Schedules CRM-1

### **Operating Income:**

Staff's recommended operating income is \$24,474. See Schedules CRM-7, CRM-8.

### **Operating Margin:**

Staff recommends an operating margin of 17.13 percent. This margin will provide sufficient revenue to pay expenses and for contingencies.

### **Rate Design**

Schedule CRM-18 reflects a complete list of the Company's present, proposed, and Staff's recommended rates and charges.

The Company's proposed rates increase the median usage residential customer bill by \$38.14 from \$38.13 to \$76.27 or 100.0 percent.

Staff's recommended rates decrease the median usage residential customer bill by \$2.12 from \$38.13 to 36.01 or 5.6 percent. This decrease is caused by Staff's redesign of rates to include an inverted 3-tier commodity rate structure.

The Company currently has a uniform rate design. Staff recommends a three-tier inverted rate design for the 5/8 x 3/4 inch and 3/4 inch meters and a two-tier inverted rate design for larger size meters.

The Company presently does not have a construction/bulk water tariff and has not requested one. Staff recommends a tariff of \$2.90 per 1,000 gallons for construction/bulk water sales.

Staff does not agree with the Company's proposed 100 percent increase in Service Line and Meter Installation Charges. Staff's recommendation will help ensure that the Company will have enough cash to pay for the actual installation of service for any meter size. See Schedule CRM-18.

The Company did not propose charges for fire sprinklers. Staff recommends charges for fire sprinklers. See Schedule CRM-18.

The Company proposed increases to service charges: (See Schedule CRM-18.)

The Company proposes an increase to Establishment charge from \$25.00 to \$50.00. The Company has not provided adequate information to support that amount. Staff recommends \$25.00. This amount is reasonable and normal.

The Company proposes an increase to Establishment (after hours) charge from \$50.00 to \$100.00. The Company has not provided adequate information to support that amount. Staff recommends \$50.00. This amount is reasonable and normal.

The Company proposes an increase to Reconnection (delinquent) from \$30.00 to \$60.00. The Company has not provided adequate information to support that amount. Staff recommends \$30.00. This amount is reasonable and normal.

The Company proposes an increase to Meter Test from \$15.00 to \$30.00. The Company has not provided adequate information to support that amount. Staff recommends \$15.00. This amount is reasonable and normal.

The Company proposes no change to Deposit service charge. Staff concurs.

The Company proposes no change to interest on deposits. Staff concurs.

The Company proposes no change to the Re-establishment service charge (within 12 months). Staff concurs.

The Company proposes an increase to Not Sufficient Funds check from \$15.00 to \$20.00. Staff concurs.

The Company proposes no change to Deferred Payment service charge. Staff concurs.

The Company proposed an increase to Meter Re-read service charge from \$15.00 to \$30.00. The Company has not provided adequate information to support that amount. Staff recommends \$15.00. This amount is reasonable and normal.

The Company proposed a change to its Late Fee service charge from 1.5 percent to 3 percent. The Company has not provided adequate information to support that amount. Staff

recommends one and one half percent on the unpaid balance per month. This amount is reasonable and normal.

**Financing:**

On March 26, 2008, the Company filed a financing application with the Commission requesting authorization to obtain a \$192,380 amortizing loan from the Water Infrastructure Finance Authority of Arizona ("WIFA"). The purpose of the financing is to fund a needed arsenic treatment facility. The Company has entered into an agreement with Adedge Technologies Inc. to construct the arsenic treatment facility. The Company's engineering cost for an arsenic treatment plant is \$192,380. The arsenic facility was built in 2008. The Company is testing and seeking approval for operation of the arsenic facility. The Company is requesting a 20-year amortizing loan from WIFA. The Company plans to use the funds to pay for the arsenic treatment facility.

Staff concludes that the proposed plant is appropriate and the estimated costs appear to be reasonable. However, this does not imply any particular future treatment for inclusion in rate base. No "used and useful" determination of the proposed plant was made, and no conclusion should be inferred for rate making or rate base purposes.

The Commission has previously authorized an arsenic cost recovery mechanism ("ACRM") to recover arsenic remediation costs. Staff concludes that authorization of an ACRM is an appropriate ratemaking treatment of the Company's, arsenic remediation costs.

The purpose of the ACRM is to permit recovery of the capital and operating costs of providing arsenic remediation once the plant is place in service when the in-service date occurs subsequent to the end of the test year. An ACRM is a two-step process. Each step requires the Company to make a filing that requests authorization for a surcharge. Step one provides for recovery of and on the arsenic plant investment. Step two provides for recovery of related operation and maintenance expenses ("O&M") going forward, and recovery of O&M deferred for up to twelve months prior to the step two filing. The specific O&M expenses that may be deferred and recovered are: 1) media replacement or regeneration costs, 2) media replacement or regeneration service costs or 3) waste media or regeneration disposal costs. Staff concludes that authorization of an ACRM that parallels those authorized in Decision Nos. 66400 and 68825 is appropriate for the Company. However, the earnings test for the ACRM should be established at Staff's recommended Operating Margin (17.13 percent). Accordingly, the Company should be required to submit ACRM filings to the Commission with the following ten schedules (See Exhibit B).

1. Balance Sheet – most current one available as of time of filing.
2. Income Statement – most current available as of time of filing with adjustments conforming with the decision.
3. Earnings Test – A schedule verifying that the Company's arsenic rate surcharge will not result in operating income in excess of the authorized operating margin.



4. Rate Review Schedule – including the incremental and pro forma effects of the proposed increase.
5. Arsenic Revenue Requirement – Includes a calculation based on earnings test.
6. Surcharge Calculation – a detailed surcharge calculation.
7. Rate Base – a schedule showing the elements and the calculation of the rate base.
8. Construction Work in Progress (CWIP) Ledger – a ledger showing the construction work in progress (as applicable).
9. Cost Allocation Factor Schedule – a schedule of all cost allocation factors amounts.
10. Typical Bill Analysis – A typical bill analysis showing the effects on residential customers at various consumption levels.

In its application, the Company provided a copy of the notice that it sent to its customers.

#### **Staff Recommendations**

- Approval of Staff's rates and charges as shown on Schedule CRM-4. In addition to collection of its regular rates and charges, the Company may collect from its customers the proportionate share of any privilege, sales or use tax per Commission Rule (14-2-409D-5).
- The Company be ordered to docket a tariff of its approved rates and charges within 30 days after the Decision in this matter is issued.
- The Company be ordered to use the depreciation rates delineated in Table B of the Engineering Report on a going forward basis.
- That the lease agreement on the well be cancelled.
- That \$200,000 finance request be approved.
- That the loans made to Joe Cordovana be substantiated with a written note and board approval and that Joe Cordovana pay back the loan in a timely manner.
- Approval of an arsenic cost recovery mechanism to provide recovery of arsenic remediation as described in this Report.
- That this docket remain open to facilitate implementation of an arsenic cost recovery mechanism.
- That the Company be required to report the actual water pumped data as read at the well meter on a monthly basis in future Annual Reports, beginning with the 2008 Annual Report filed in 2009.

- That the Company monitor the Appaloosa water system and submit the gallons pumped and sold to determine the non-account water for one full year. The Company should coordinate when it reads the well meters each month with customer billing so that an accurate accounting is determined. The results of this monitoring and reporting shall be docketed as a compliance item in this case within 13 months of the effective date of the order issued in this proceeding. If the reported water loss is greater than 10 percent the Company shall prepare a report containing a detailed analysis and plan to reduce water loss to 10 percent or less. If the Company believes it is not cost effective to reduce the water loss to less than 10 percent, it should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted, shall be docketed as a compliance item within 13 months of the effective date of the order issued in this proceeding.
- That the Company's filed backflow prevention tariff be approved. Staff further recommends that the Company file the tariff with Docket Control, as a compliance item in this docket, within 45 days after the effective date of the decision in this case.
- That the Company file with Docket Control, as a compliance item in this docket, the Certificate of AOC issued by ADEQ or Yavapai County for the waterline extension across Road 4 North at Harrison Drive by December 31, 2009.

**Appaloosa Water Company**

Docket No. W-03443A-08-0313 AND W-03443A-08-0177

Test Year Ended December 31, 2007

**SCHEDULES OF CHARLES R. MYHLHOUSEN**

**TABLE OF CONTENTS TO SCHEDULES CRM**

<u>SCH #</u>	<u>TITLE</u>
CRM-1	REVENUE REQUIREMENT
CRM-2	GROSS REVEINUE CONVERSION FACTOR
CRM-3	RATE BASE - ORIGINAL COST
CRM-4	SUMMARY OF RATE BASE ADJUSTMENTS
CRM-5	RATE BASE ADJUSTMENT #1 - CONTRIBUTION IN AID OF CONSTRUCTION
CRM-6	RATE BASE ADJUSTMENT #2 - CONTRIBUTION IN AID OF CONSTRUCTION AMORIZATION
CRM-7	OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED
CRM-8	SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR
CRM-9	OPERATING INCOME ADJUSTMENT #1 - METER WATER REVENUE
CRM-10	OPERATING ADJUSTMENT #2 - SALARIES AND WAGES
CRM-11	OPERATING ADJUSTMENT #3 - REPAIRS AND MAINTANENCE
CRM-12	OPERATING ADJUSTMENT #4 - OUTSIDE SERVICES
CRM-13	OPERATING INCOME ADJUSTMENT #5 - WATER TESTING
CRM-14	OPERATING INCOME ADJUSTMENT #6-DEPRECIATION
CRM-15	OPERATING INCOME ADJUSTMENT #7- TAXES OTHER THAN INCOME
CRM-16	OPERATING INCOME ADJUSTMENT #8-PROPERTY TAXES
CRM-17	OPERATING INCOME ADJUSTMENT #9 - INCOME TAX EXPENSE
CRM-18	RATE DESIGN
CRM-19	TYPICAL BILL ANALYSIS

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY ORIGINAL COST	(B) COMPANY FAIR VALUE	(C) STAFF ORIGINAL COST	(D) STAFF FAIR VALUE
1	Adjusted Rate Base	\$ 679,726	\$ 679,726	\$ (55,099)	\$ (55,099)
2	Adjusted Operating Income (Loss)	\$ (1,394)	\$ (1,394)	\$ 24,474	\$ 24,474
3	Current Operating Margin	-0.86%	-0.86%	17.13%	17.13%
4	Required Operating Margin	N/A	N/A	17.13%	17.13%
5	Required Operating Income	\$ 161,095	\$ 161,095	\$ 24,474	\$ 24,474
6	Operating Income Deficiency (L5 - L2)	\$ 162,489	\$ 162,489	\$ -	\$ -
7	Gross Revenue Conversion Factor	1.0000	1.0000	1.2914	1.2914
8	Required Revenue Increase (L7 * L6)	\$ 162,489	\$ 162,489	\$ 0	\$ 0
9	Adjusted Test Year Revenue	\$ 162,489	\$ 162,489	\$ 142,873	\$ 142,873
10	Proposed Annual Revenue (L8 + L9)	\$ 324,978	\$ 324,978	\$ 142,873	\$ 142,873
11	Required Increase in Revenue (%)	100.00%	100.00%	0.00%	0.00%
12	Rate of Return on Equity (%)	N/A	N/A	N/A	N/A
12	Operating Margin (L5/L10)	49.57	49.57	17.13	17.13

References:

Columns [A] and [B]: Company Application Schedules

Columns [C] and [D]: STAFF Schedules CRM-2, CRM-3 and CRM-11

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
<u>Calculation of Gross Revenue Conversion Factor:</u>					
1	Revenue	100.0000%			
2	Uncollectible Factor (Line 11)	0.0000%			
3	Revenues (L1 - L2)	100.0000%			
4	Combined Federal and State Tax Rate (Line 17) + Property Tax Factor (Line 22)	22.5668%			
5	Subtotal (L3 - L4)	77.4332%			
6	Revenue Conversion Factor (L1 / L5)	1.291435715			
<u>Calculation of Uncollectible Factor:</u>					
7	Unity	100.0000%			
8	Combined Federal and State Tax Rate (Line 17)	20.9228%			
9	One Minus Combined Income Tax Rate (L7 - L8)	79.0772%			
10	Uncollectible Rate	0.0000%			
11	Uncollectible Factor (L9 * L10)	0			
<u>Calculation of Effective Tax Rate:</u>					
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
13	Arizona State Income Tax Rate	6.9680%			
14	Federal Taxable Income (L12 - L13)	93.0320%			
15	Applicable Federal Income Tax Rate (Line 44)	15.0000%			
16	Effective Federal Income Tax Rate (L14 x L15)	0.139548			
17	Combined Federal and State Income Tax Rate (L13 + L16)	20.9228%			
<u>Calculation of Effective Property Tax Factor</u>					
18	Unity	100.0000%			
19	Combined Federal and State Tax Rate (Line 17)	20.9228%			
20	One Minus Combined Income Tax Rate (L18 - L19)	79.0772%			
21	Property Tax Factor (XXX-18, L24)	2.0790%			
22	Effective Property Tax Factor (L 21 * L 22)	0.016439969			
23	Combined Federal and State Tax and Property Tax Rate (L17+L22)		22.5668%		
24	Required Operating Income (Schedule XXX-1, Line 5)	\$ 24,474			
25	Adjusted Test Year Operating Income (Loss) (Schedule XXX-10, Line 40)	\$ 24,474			
26	Required Increase in Operating Income (L24 - L25)		\$ 0		
27	Income Taxes on Recommended Revenue (Col. (D), L52)	\$ 6,475			
28	Income Taxes on Test Year Revenue (Col. (B), L52)	\$ 6,475			
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		\$ -		
30	Recommended Revenue Requirement (Schedule XXX-1, Line 10)	\$ 142,873			
31	Uncollectible Rate (Line 10)	0.0000%			
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	\$ -			
33	Adjusted Test Year Uncollectible Expense	\$ -			
34	Required Increase in Revenue to Provide for Uncollectible Exp. (L32 - L33)		\$ -		
35	Property Tax with Recommended Revenue (XXX-18, L19)	\$ 5,030			
36	Property Tax on Test Year Revenue (XXX-18, L 16)	\$ 5,030			
37	Increase in Property Tax Due to Increase in Revenue (XXX-18, L22)		\$ 0		
38	Total Required Increase in Revenue (L26 + L30 + L34+L37)		\$ 0		
<u>Calculation of Income Tax:</u>					
39	Revenue (Schedule XXX-10, Col. [C], Line 5 & Sch. XXX-1, Col. [B], Line 10)	\$ 142,873	\$ 0	\$ 142,873	
40	Operating Expenses Excluding Income Taxes	\$ 111,924	\$ 1	\$ 111,924	
41	Synchronized Interest (L47)	\$ -		\$ -	
42	Arizona Taxable Income (L36 - L37 - L38)	\$ 30,949		\$ 30,949	
43	Arizona State Income Tax Rate	6.9680%		6.9680%	
44	Arizona Income Tax (L39 x L40)		\$ 2,157		\$ 2,157
45	Federal Taxable Income (L33 - L35)	\$ 28,792		\$ 28,792	
46	Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15%	\$ 4,319		\$ 4,319	
47	Federal Tax on Second Income Bracket (\$50,001 - \$75,000) @ 25%	\$ -		\$ -	
48	Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34%	\$ -		\$ -	
49	Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39%	\$ -		\$ -	
50	Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34%	\$ -		\$ -	
51	Total Federal Income Tax		\$ 4,319		\$ 4,319
52	Combined Federal and State Income Tax (L35 + L42)		\$ 6,475		\$ 6,475
53	Applicable Federal Income Tax Rate [Col. (D), L42 - Col. (B), L42] / [Col. (C), L36 - Col. (A), L36]				15.00%

**RATE BASE - ORIGINAL COST**

LINE NO.	(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	(C) ADJ No.	(D) STAFF AS ADJUSTED
1	Plant in Service	\$ 1,329,645	\$ -	\$ 1,329,645
2	Less: Accumulated Depreciation	79,601	-	79,601
3	Net Plant in Service	<u>\$ 1,250,044</u>	<u>\$ -</u>	<u>\$ 1,250,044</u>
<u>LESS:</u>				
4	Contributions in Aid of Construction (CIAC)	\$ 759,327	1	\$ 759,327
5	Less: Accumulated Amortization	24,502	2	24,502
6	Net CIAC	<u>734,825</u>		<u>734,825</u>
7	Imputed Regulatory Contributions	-	-	-
8	Advances in Aid of Construction (AIAC)	570,318	-	570,318
9	Imputed Regulatory Advances	-	-	-
10	Customer Deposits	-	-	-
11	Investment Tax Credits	-	-	-
12	Deferred Income Tax Credits (Debits)	-	-	-
<u>ADD:</u>				
13	Cash Working Capital	-	-	-
12	Prepayments	-	-	-
13	Supplies Inventory	-	-	-
14	Projected Capital Expenditures	-	-	-
15	Deferred Debits	-	-	-
16	Citizens Acquisition Adjustment	-	-	-
17	<b>Original Cost Rate Base</b>	<u>\$ 679,726</u>	<u>\$ 734,825</u>	<u>\$ (55,099)</u>

References:

Column [A], Company Application  
Column [B]: Column [C] - Column [A]  
Column [C]: Schedule CRM-4  
ADJ 1 Schedule CRM-4  
ADJ 2 Schedule CRM-13

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTED	[C] Adj No.	[D] STAFF RECOMMENDED
<u>PLANT IN SERVICE:</u>						
1		Intangible Plant				
2	301.00	Organization	\$ 264	\$ -		\$ 264
3	302.00	Franchises	2,309	-		\$ 2,309
4	303.00	Land & Land Rights	3,161	-		\$ 3,161
5		Subtotal Intangible	5,734	-		5,734
6						
7		Source of Supply				
8	304.00	Structures & Improvements	67,051	-		\$ 67,051
9	305.00	Collecting and Impounding Res.	-	-		-
10	306.00	Lake River and Other Intakes	-	-		-
11	307.00	Wells and Springs	238,519	-		\$ 238,519
12	308.00	Infiltration Galleries and Tunnels	-	-		-
13	309.00	Supply Mains	-	-		-
14	310.00	Power Generating Equipment	-	-		-
15	311.00	Electric Pumping Equipment	94,131	-		\$ 94,131
16	312.00	Collecting & Impounding Reservoirs	-	-		-
17	313.00	Lakes, Rivers, Other Intakes	-	-		-
18		Subtotal Source of Supply	399,701	-		399,701
19						
20		Water Treatment				
21	320.00	Water Treatment Equipment	-	-		-
22	321.00	Structures & Improvements	-	-		-
23	323.00	Other Power Production	-	-		-
24	325.00	Electric Pumping Equipment	-	-		-
25	326.00	Diesel Pumping Equipment	-	-		-
26	328.10	Gas Engine Pumping Equipment	-	-		-
27		Subtotal Water Treatment	-	-		-
28						
29		Transmission & Distribution				
30	330.00	Distribution Reservoirs & Standpipe	100,438	-		\$ 100,438
31	331.00	Transmission and Distribution Mains	745,102	-		\$ 745,102
32	332.00	Services	-	-		-
33	334.00	Meters	15,055	-		\$ 15,055
34	335.00	Hydrants	48,876	-		\$ 48,876
35	336.00	Backflow Prevention Devices	-	-		-
36	339.00	Other Plant and Miscellaneous Equipment	-	-		-
37		Subtotal Transmission & Distribution	909,471	-		909,471
38						
39		General Plant				
40	340.00	Office Furniture and Equipment	1,850	-		\$ 1,850
41	340.10	Computer and Software	-	-		-
42	341.00	Transportation Equipment	-	-		-
43	342.00	Stores Equipment	-	-		-
44	343.00	Tools and Work Equipment	-	-		-
45	344.00	Laboratory Equipment	-	-		-
46	345.00	Power Operated Equipment	-	-		-
47	346.00	Communications Equipment	-	-		-
48	347.00	Miscellaneous Equipment	-	-		-
49	349.00	Other Tangible Plant	12,889	-		\$ 12,889
50		Plant Held for Future Use	-	-		-
51		Subtotal General Plant	14,739	-		14,739
52						
53		Total	1,329,645	-		\$ 1,329,645
54	Add:					
55			-	-		-
56						
57	Less:					
58			-	-		-
59						
60	Total Plant in Service		\$ 1,329,645	\$ -		\$ 1,329,645
61	Less: Accumulated Depreciation		79,601	-		79,601
62	Net Plant in Service (L59 - L 60)		\$ 1,250,044	-		\$ 1,409,246
63						
64	LESS:					
65	Contributions in Aid of Construction (CIAC)			\$ 759,327	1	\$ 759,327
66	Less: Accumulated Amortization			24,502	2	\$ 24,502
67	Net CIAC (L25 - L26)			734,825		\$ 734,825
68	Imputed Regulatory Contributions			-		-
69	Advances in Aid of Construction (AIAC)		570,318	-		\$ 570,318
70	Imputed Regulatory Advances		-	-		-
71	Customer Meter Deposits		-	-		-
72	Investment Tax Credits		-	-		-
73	Deferred Income Tax Credits (Debits)		-	-		-
74						
75	ADD:					
76	Cash Working Capital Allowance		-	-		-
77	Prepayments		-	-		-
78	Supplies Inventory		-	-		-
79	Projected Capital Expenditures		-	-		-
80	Deferred Debits		-	-		-
81	Intentionally left blank		-	-		-
82	Original Cost Rate Base		\$ 679,726	\$ 734,825		\$ (55,098)

ADJ # References:  
1 Schedule CRM-5  
2 Schedule CRM-13  
Column [A] + Col [B] = Col [D]

Appaloosa Water Company  
Docket No. W-03443A-08-0313  
Test Year Ended December 31, 2007

Schedule CRM-5

**RATE BASE ADJUSTMENT #1 - Contributions in aid of construction (CIAC)**

LINE NO.	DESCRIPTION	[A] COMPANY Test Year	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Contribution in Aid of Construction	.000	\$ 759,327	\$ 759,327
2				
3				-
4	Total Contributions in Aid of Construction	<u>\$ -</u>	<u></u>	<u>\$ 759,327</u>
5				
6	Total Plant in Service	\$ 1,329,645		
7	Less: Advances (AIAC)	570,318		
8	Balance of Plant CIAC	<u>\$ 759,327</u>		
9				
10	<u>REFERENCES:</u>			
11	Col: [A] Line 5 Company Application Page 14			
12	Col:[A] Line 6 Company Application Page 24			
13	Col:[B] Staff Report CRM			
14	Col: [C] Col: [A] +Col:[B]			



Appaloosa Water Company  
Docket No. W-03443A-08-0313  
Test Year Ended December 31, 2007

Schedule CRM-6

**RATE BASE ADJUSTMENT #2 - Contributions in Aid of Construction (CIAC) Amorization**

LINE NO.	DESCRIPTION	[A] COMPANY Test Year	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Contribution in Aid of Construction Amorization	<u>.00</u>	<u>\$ 24,502</u>	<u>\$ 24,502</u>
2				

Staff adjusted contribution in aid of construction	\$ 759,327
Depreciation Rate	<u>0.032268616</u>
CIAC amorization	<u>\$ 24,502</u>

OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] ADJ No.	[D] STAFF TEST YEAR AS ADJUSTED	[E] STAFF PROPOSED CHANGES	[F] STAFF RECOMMENDED
<b>REVENUES:</b>							
1	461.00 Metered Water Sales	\$ 161,635	\$ (19,616)	1	\$ 142,019	\$ 0	\$ 142,019
2	460.00 Water Sales - Unmetered	-	-		-	-	-
3	474.00 Other Operating Revenue	854	-		854	-	854
4	<b>Total Operating Revenues</b>	<b>\$ 162,489</b>	<b>\$ (19,616)</b>		<b>\$ 142,873</b>	<b>\$ 0</b>	<b>\$ 142,873</b>
5							
6	<b>OPERATING EXPENSES:</b>						
7	601.00 Wages and Salaries	\$ 45,730	(2,491)	2	\$ 43,239	\$ -	\$ 43,239
8	610.00 Purchased Water	-	-		-	-	-
9	615.00 Purchased Power	8,320	-		8,320	-	8,320
10	618.00 Chemicals	-	-		-	-	-
11	620.00 Repairs & Maintenance	8,226	(5,269)	3	2,957	-	2,957
12	621.00 Office Supplies and Expense	4,751	-		4,751	-	4,751
13	630.00 Outside Services	30,589	(19,861)	4	10,728	-	10,728
14	635.00 Water Testing	3,012	(1,433)	5	1,579	-	1,579
15	641.00 Rents	8,000	-		8,000	-	8,000
16	650.00 Transportation	-	-		-	-	-
17	657.00 Insurance General Liability	6,673	-		6,673	-	6,673
18	675.00 Miscellaneous Expense	1,625	-		1,625	-	1,625
19	403.00 Depreciation Expense	39,792	(21,471)	6	18,321	-	18,321
20	408.00 Taxes Other Than Income	2,173	(1,471)	7	702	-	702
21	408.11 Property Taxes	4,992	38	8	5,030	-	5,030
22	409.00 Income taxes	-	6,475	9	6,475	-	6,475
23	<b>Total Operating Expenses</b>	<b>163,883</b>	<b>(45,483)</b>		<b>118,400</b>	<b>-</b>	<b>118,400</b>
24	<b>Operating Income (Loss)</b>	<b>\$ (1,394)</b>	<b>\$ 25,867</b>		<b>\$ 24,474</b>	<b>\$ 0</b>	<b>24,474</b>

References:

Column (A): Company Schedule Page 19

Adj No 1 Schedule CRM 9

Adj No. 2 Schedule CRM 10

Adj No. 3 Schedule CRM 11

Adj No. 4 Schedule CRM 12

Adj No 5 Schedule CRM 13

Adj No 6 Schedule CRM 14

Adj No 7 Schedule CRM 15

Adj No 8 Schedule CRM 16

Adj No 9 Schedule CRM 17

## SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1 Metered Water Revenue	[C] ADJ #2 Salaries and Wages	[D] ADJ #3 Repairs and Maintenance	[E] ADJ #4 Outside Services	[F] ADJ #5 Water Testing	[G] ADJ #6 Depreciation Expense	[H] ADJ #7 Taxes Other Income Tax	[I] ADJ #8 Property Tax	[J] ADJ #9 Income Tax	[J] STAFF ADJUSTED
<u>REVENUES:</u>												
1	461.00 Metered Water Revenue	\$ 161,635	\$ (19,616)	-	-	-	-	-	-	-	-	-
2	460.00 Water Sales - Unmetered	-	-	-	-	-	-	-	-	-	-	-
3	474.00 Other Operating Revenue	854	-	-	-	-	-	-	-	-	-	142,019
4	Total Operating Revenues	\$ 162,489	\$ (19,616)	-	-	-	-	-	-	-	-	854
5												142,873
<u>OPERATING EXPENSES:</u>												
6	601.00 Wages and Salaries	\$ 45,730	-	(2,491)	-	-	-	-	-	-	-	43,239
7	610.00 Purchased Water	-	-	-	-	-	-	-	-	-	-	-
8	615.00 Purchased Power	8,320	-	-	-	-	-	-	-	-	-	8,320
9	618.00 Chemicals	-	-	-	-	-	-	-	-	-	-	-
10	620.00 Repairs & Maintenance	8,226	-	(5,269)	-	-	-	-	-	-	-	2,957
11	621.00 Office Supplies and Expense	4,751	-	-	-	-	-	-	-	-	-	4,751
12	630.00 Outside Services	30,589	-	-	(19,861)	-	-	-	-	-	-	10,728
13	635.00 Water Testing	3,012	-	-	-	-	(1,433)	-	-	-	-	1,579
14	641.00 Rents	8,000	-	-	-	-	-	-	-	-	-	8,000
15	650.00 Transportation	-	-	-	-	-	-	-	-	-	-	-
16	657.00 Insurance General Liability	6,673	-	-	-	-	-	-	-	-	-	6,673
20	675.00 Miscellaneous Expense	1,625	-	-	-	-	-	-	-	-	-	1,625
22	403.00 Depreciation Expense	39,792	-	-	-	-	-	(21,471)	-	-	-	18,321
23	408.00 Taxes Other Than Income	2,173	-	-	-	-	-	-	-	-	-	702
25	408.11 Property Taxes	4,992	-	-	-	-	-	-	(1,471)	-	-	5,030
26	409.00 Income taxes	-	-	-	-	-	-	-	-	38	-	6,475
27	Total Operating Expenses	163,883	\$ (19,616)	\$ (2,491)	\$ (5,269)	\$ (19,861)	(1,433)	(21,471)	\$ (1,471)	\$ 38	\$ 6,475	118,400
28	Operating Income (Loss)	\$ (1,394)	\$ (19,616)	\$ (2,491)	\$ 5,269	\$ 19,861	(1,433)	21,471	\$ 1,471	\$ 38	\$ 6,475	24,474
29												

## References

- Adj No 1 Schedule CRM 9  
 Adj No. 2 Schedule CRM 10  
 Adj No. 3 Schedule CRM 11  
 Adj No. 4 Schedule CRM 12  
 Adj No 5 Schedule CRM 13  
 Adj No 6 Schedule CRM 14  
 Adj No 7 Schedule CRM 15  
 Adj No 8 Schedule CRM 16  
 Adj No 9 Schedule CRM 17

**OPERATING INCOME ADJUSTMENT # 1 - Meter Water Revenue**

Line No.	Description	[A] Company As Filed		[B] Staff Adjustments		[C] Staff As Adjusted	
		\$		\$		\$	
1	Meter Water Revenue	\$	161,635	\$	(19,616)	\$	142,019
2							
3							
4							
5	Metered Water Revenue					\$	161,635
6	Journal entry incorrectly post to metered water revenue.						(19,616)
7	Adjusted Metered Water Revenue					\$	142,019
8							
9	<u>References</u>						
10	Col. [A] Company Schedule Page 19						
11	Col [B] General Ledger Page 199 and Staff Report-CRM						
12	Col. [C] - Col. [E] = Col. [G]						

**Appaloosa Water Company**

Docket No. W-03443A-08-0313

Test Year Ended December 31, 2007

Schedule CRM-10

**OPERATING INCOME ADJUSTMENT # 2 - Wages and Salaries**

Line		[A] Company	[B] Staff	[C] Staff
No.	Description	As Filed	Adjustments	As Adjusted
1	Wages and Salaries	\$ 45,730	\$ (2,491)	\$ 43,239
2				
3				
4	<u>References</u>			
5	Col. [A] Company Schedule Page 19			\$ 45,730
6	Per Staff Report- CRM			43,239
7	Col. [A] - Col. [B] = Col. [C]			\$ (2,491)
8				
9	<u>Explanation</u>			
10	Tara Salary Test Year		\$ 13,239	
11	Joe Cordvana Contract Salary		30,000	
13	Total		\$ 43,239	

**OPERATING INCOME ADJUSTMENT # 3 - Repairs and Maintenance**

Line No.	Description	[A] Company As Filed	[B] Staff Adjustments	[C] Staff As Adjusted
1	Repairs and Maintenance	\$ 8,226	\$ (5,269)	\$ 2,957
2				
3	The following are one time expenses and not expected to repeat in the near future.			
4				
5	<u>Casual Labor</u>			
6	Blas Guerro Barcenos		\$ (318.72)	
7	Ramro Raminez		(424.96)	
8	Paula Flores		(102.00)	
9	Beatiz Rabago		(280.00)	
10	Beatiz Rabago		(224.00)	
11	Ferando Valenzuela		(216.00)	
12	Prescott Lock and Safe		(231.76)	
13				
14	<b>For future plant use</b>			
15	Phoenix Pavers for arsenic plant		(3,472.00)	
16	<b>Total</b>		<u>\$ (5,269.44)</u>	
17				
18	<u>References</u>			
19	Col. [A] Company Schedule Page 19			\$ 8,226
20	Per Staff Report - CRM			(5,269)
21	Col. [C] - Col. [E] = Col. [G]			<u>\$ 2,957</u>

**OPERATING INCOME ADJUSTMENT # 4 - Outside Services**

Line No.	Description	[A] Company As Filed	[B] Staff Adjustments	[C] Staff As Adjusted
1	Outside Services	\$ 30,589	\$ (19,861)	\$ 10,728
2				
3				
4	References			
5	Col. [A] Company Schedule Page 19			\$ 30,589
6	Per Staff Report - CRM			(19,861)
7	Col. [C] - Col. [E] = Col. [G]			\$ 10,728
8				
9	The following are one time expenses or			
10	not test year expenses. The one time expenses			
11	are not expected to repeat in the near future.			
12	LESS:			
13	Management fee paid for year 2006		\$ 6,000.00	
19	Brian Ingram		1,000.00	
20	M.E. Evans Survey		1,975.00	
21	Nelson Law Office Invoice No. 10264		1,856.31	
22	Nelson Law Office Invoice No. 10268		1,453.29	
23	Douglas C. Nelson Invoice No. 10284		1,083.82	
24	Douglas C. Nelson Invoice No. 10288		1,022.08	
25	Douglas C Nelson Invoice No.10293		1,065.00	
26	Welker Land Surveying July 14, 2007		625.00	
27	Stegall Katz, Whitker P.C. # 44783		212.50	
28	Douglas c. Nelson Invoice No. 10303		2,026.11	
29	Bobby Bings Catering		1,000.00	
30	M.E. Evans Survey Invoice No. 709		1,975.00	
31	Sub-Total		\$ 21,294.11	
32	ADD:			
33	Transfer from Water Testing Expense - additional operator exp.		1,433.00	
34	Total		19,861.11	

**Appaloosa Water Company**

Docket No. W-03443A-08-0313 AND W-03443A-08-0177

Test Year Ended December 31, 2007

Schedule CRM-13

**OPERATING INCOME ADJUSTMENT # 5 - Water Testing Expense**

Line No.	Description	[A] Company As Filed	[B] Staff Adjustments	[C] Staff As Adjusted
1	Water Testing Expense	\$ 3,012	\$ (1,433)	\$ 1,579
2				
3				
4	<u>References</u>			
5	Col. [A] Company Schedule Page 19			\$ 3,012
6	Per Staff Report - CRM			(1,433)
7	Col. [A] - Col. [B] = Col. [C]			\$ 1,579
8				
9	Per Staff Engineer transferred to Outside Services			\$ (1,433)
10	for additional operator cost.			



**OPERATING INCOME ADJUSTMENT # 6 - Depreciation**

Line No.	Description	[A] Company As Filed	[B] Staff Adjustments	[C] Staff As Adjusted
1	Depreciation Expense	\$ 39,792.00	\$ 3,031.00	\$ 18,321.00
2	CIAC amorizaton		(24,502.00)	
3	Total		\$ (21,471.00)	
4				
5				
6	Plant in Service	\$ 1,329,645.00		
7				
8	Total Advances in aid of construction	570,318.00		
9	Balance of Plant	\$ 759,327.00		
10				
11	Contributions in aid of construction	\$ 759,327.00		
12	Depreciation Rate	0.032268616		
13	Depreciation reduction for contributions (CIAC) Amorization	\$ 24,502.43		
14				
15	Depreciation claimed in application Page 19	\$ 39,792.00		
16		3,031.00		
17		\$ 42,823.00		
18	Less: CIAC amorization	24,502.00		
19	Test Year adjusted depreciation less CIAC amorization	\$ 18,321.00		
20	<b>References</b>			
21	Line 10 Company's Application Page 19			
22	Line 14 per Staff Report CRM			

**Appaloosa Water Company**

Docket No. W-03443A-08-0313 AND W-03443A-08-0177

Test Year Ended December 31, 2007

Schedule CRM-15

**OPERATING INCOME ADJUSTMENT # 7 - Taxes Other Than Income**

Line No.	Description	[A] Company As Filed	[B] Staff Adjustments	[C] Staff As Adjusted
1	Taxes Other Than Income	<u>\$ 2,173</u>	<u>\$ (1,471)</u>	<u>\$ 702</u>

References

Col. [A] Company Schedule Page 19

Per Staff Report - CRM

Col. [C] - Col. [B] = Col. [C]

\$	2,173
	(1,471)
<u>\$</u>	<u>702</u>

Annual Sampling Fee included in water testing expense  
by Staff engineer.

removal of balance of sales taxes

\$	(746)
	(725)
<u>\$</u>	<u>(1,471)</u>

**OPERATING INCOME ADJUSTMENT # 8-PROPERTY TAXES**

LINE NO.	Property Tax Calculation	STAFF AS ADJUSTED	STAFF RECOMMENDED
		Column [A]	Column [B]
1	Staff Adjusted Test Year Revenues - 2006	\$ 142,873	\$ 142,873
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	285,746	\$ 285,746
4	Staff Recommended Revenue, Per Schedule CRM-6	142,873	\$ 142,873
5	Subtotal (Line 4 + Line 5)	428,619	428,619
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	142,873	\$ 142,873
8	Department of Revenue Multiplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	285,746	\$ 285,746
10	Plus: 10% of CWIP -	-	-
11	Less: Net Book Value of Licensed Vehicles	-	\$ -
12	Full Cash Value (Line 9 + Line 10 - Line 11)	285,746	\$ 285,746.00
13	Assessment Ratio	23.5%	23.5%
14	Assessment Value (Line 12 * Line 13)	67,150	\$ 67,150
15	Composite Property Tax Rate	7.4900%	7.4900%
16	Staff Proposed Property Tax Expense (Line 14 * Line 15)	\$ 5,030	
17	Company Proposed Property Tax	4,992	
18	Staff Test Year Adjustment (Line 16-Line 17)	\$ 38	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		\$ 5,030
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		\$ 5,030
21	Increase/(Decrease) to Property Tax Expense		\$ 0
22	Decrease to Property Tax Expense		\$ 0
23	Increase in Revenue Requirement		0
24	Decrease to Property Tax per Dollar Increase in Revenue (Line 19/Line 20)		0.000074%

References:

Col [A]: Company Application Page 19  
Col [B]: Staff Report CRM

**Appaloosa Water Company**

Docket No. W-03443A-08-0313 AND W-03443A-08-0177

Test Year Ended December 31, 2007

Schedule CRM-17

**OPERATING INCOME ADJUSTMENT # 9 INCOME TAXES**

	[A]	[B]	[C]	[D]
Calculation of Income Tax:				
Revenue (Schedule	\$ 142,873	0.00001	\$ 142,873	
Operating Expenses Excluding Income Taxes	\$ 111,924		\$ 111,924	
Synchronized Interest (L47)	0		0	
Arizona Taxable Income	\$ 30,949		\$ 30,949	
Arizona State Income Tax Rate	0.06968		0.06968	
Arizona Income Tax	\$ 2,157		\$ 2,157	
Federal Taxable Income	\$ 28,792		\$ 28,792	
Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15%	\$ 4,319		\$ 4,319	
Federal Tax on Second Income Bracket (\$50,001 - \$75,000) @ 25%	0		0	
Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34%	0		0	
Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39%	0		0	
Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34%	0		0	
Total Federal Income Tax	\$ 4,319		\$ 4,319	
Combined Federal and State Income Tax (L12 + L19)	\$ 6,475		\$ 6,475	

Applicable Federal Income Tax Rate [Col. (D), L42 - Col. (B), L42] / [Col. (C), L36 - Col. (A), L36]

0.150000061

Income Taxes on Recommended Revenue (Col. (D), L52)	\$ 6,475
Income Taxes on Test Year Revenue (Col. (B), L52)	\$ 6,475

**RATE DESIGN**

**Monthly Usage Charge**  
Residential and Commercial  
5/8" x 3/4" Meter  
3/4" Meter  
1" Meter  
1 1/2" Meter  
2" Meter  
3" Meter  
4" Meter  
6" Meter

Present Rates	Company Proposed	Staff Recommended
25.00	50.00	25.00
25.00	50.00	25.00
41.67	83.34	41.67
83.33	166.66	83.33
133.33	266.66	133.33
266.67	533.34	266.67
416.67	833.34	416.67
833.33	1666.66	833.33

**Commodity Charges**  
Gallons Included in any Minimum  
Excess of Minimum - per 1,000 Gallons  
5/8" x 3/4" Meter  
3/4" Meter

Present		Company Proposed		Staff Recommended		
1,000		1,000		Zero		
1st Tier		1st Tier		1st Tier	2nd Tier	3rd Tier
\$ 2.50		\$ 5.00		\$ 1.50	\$ 2.00	\$ 2.90
\$ 2.50		\$ 5.00		3,000	7,000	Infinite
\$ 2.50		\$ 5.00		3,000	7,000	Infinite
				1st Tier	2nd Tier	
				\$ 2.00	\$ 2.90	n/a
\$ 2.50		\$ 5.00		7,000	Infinite	n/a
\$ 2.50		\$ 5.00		15,000	Infinite	n/a
\$ 2.50		\$ 5.00		24,000	Infinite	n/a
\$ 2.50		\$ 5.00		48,000	Infinite	n/a
\$ 2.50		\$ 5.00		75,000	Infinite	n/a
\$ 2.50		\$ 5.00		150,000	Infinite	n/a

**Service Line and Meter Installation Charges**

5/8" x 3/4" Meter  
3/4" Meter  
1" Meter  
1 1/2" Meter  
2" Turbine Meter  
2" Compound Meter  
3" Turbine Meter  
3" Compound Meter  
4" Turbine Meter  
4" Compound Meter  
6" Turbine Meter  
6" Compound Meter

Present Rates	Company Proposed		Staff Recommended		
	Service Line	Meter Install.	Service Line	Meter Install.	Total
400.00	800.00		445.00	155.00	600.00
440.00	880.00		445.00	255.00	700.00
500.00	1,000.00		495.00	315.00	810.00
715.00	1,430.00		550.00	525.00	1,075.00
1,170.00	2,340.00		830.00	1,045.00	1,875.00
1,700.00	3,400.00		830.00	1,890.00	2,720.00
1,585.00	3,170.00		1,045.00	1,670.00	2,715.00
2,190.00	4,380.00		1,165.00	2,545.00	3,710.00
2,570.00	5,080.00		1,490.00	2,670.00	4,160.00
3,215.00	6,430.00		1,670.00	3,645.00	5,315.00
4,815.00	9,830.00		2,210.00	5,025.00	7,235.00
6,270.00	12,540.00		2,330.00	6,920.00	9,250.00

**Service Charges**

Establishment  
Establishment (After Hours)  
Reconnection (Delinquent)  
Reconnection (Delinquent)- After Hours  
Meter Test (If Correct)  
Deposit (1)  
Re-Establishment (Within 12 Months) 92)  
NSF Check  
Deferred Payment (3)  
Meter Re-Read (If Correct)  
Late Fee

Present	Company Proposed	Staff Recommended
25.00	50.00	25
50.00	100.00	50
30.00	60.00	30
50.00	100.00	50
15.00	30.00	15
per rule	per rule	*
months off sys	months off sys	**
10.00	20.00	20
per rule	per rule	...
15.00	30.00	15
1.5% of outstar	1.5% of outstar	****

**Monthly Service Charge for Fire Sprinkler**

4 inch or Smaller	n/a	n/a	*****
6 inch	n/a	n/a	*****
8 inch	n/a	n/a	*****
10 inch	n/a	n/a	*****
Larger than 10 inch			

**Company Proposed**

- Per Rule deposit ( R-14-2-403.B)
- Per Rule Deposit Interest (R-14-2-403.B.3)
- Per Rule Resestablishment (14-2-403.D.1)

**Staff Recommended**

- \* Per Commission Rules (R14-2-403.B) Two times the average bill.
- \*\* Per Commission Rules (R14-2-403.B) Two and one-half times the average bill
- \*\*\* Per Commission Rules (R14-2-403.B)
- \*\*\*\* Months off system times the minimum (R14-2-403.D)
- \*\*\*\*\* 100 percent of monthly minimum for a comparable Sized Meter Connection, but no less that \$5.00 per month. The Service Charge for Fire Sprinklers is only applicable for service lines separate and distinct from the primary water service line.

**TYPICAL BILL ANALYSIS**

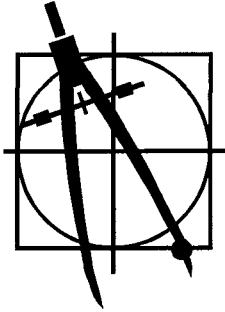
General Service 3-4 Inch Meter

Average Number of Customers: 189

<u>Company Proposed</u>	<u>Gallons</u>	<u>Present Rates</u>	<u>Proposed Rates</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
Average Usage	9,938	\$47.34	\$94.69	\$47.35	100.0%
Median Usage	6,253	\$38.13	\$76.27	\$38.14	100.0%
<u>Staff Proposed</u>					
Average Usage	9,938	\$47.34	\$46.02	(\$1.32)	-2.8%
Median Usage	6,253	\$38.13	\$36.01	(\$2.12)	-5.6%

Present & Proposed Rates (Without Taxes)  
General Service 3-4 Inch Meter

<u>Gallons Consumption</u>	<u>Present Rates</u>	<u>Company Proposed Rates</u>	<u>% Increase</u>	<u>Staff Proposed Rates</u>	<u>% Increase</u>
0	\$25.00	\$50.00	100.0%	\$25.00	0.0%
1,000	25.00	50.00	100.0%	26.50	6.0%
2,000	27.50	55.00	100.0%	28.00	1.8%
3,000	30.00	60.00	100.0%	29.50	-1.7%
4,000	32.50	65.00	100.0%	31.50	-3.1%
5,000	35.00	70.00	100.0%	33.50	-4.3%
6,000	37.50	75.00	100.0%	35.50	-5.3%
7,000	40.00	80.00	100.0%	37.50	-6.3%
8,000	42.50	85.00	100.0%	40.40	-4.9%
9,000	45.00	90.00	100.0%	43.30	-3.8%
10,000	47.50	95.00	100.0%	46.20	-2.7%
15,000	60.00	120.00	100.0%	60.70	1.2%
20,000	72.50	145.00	100.0%	75.20	3.7%
25,000	85.00	170.00	100.0%	89.70	5.5%
50,000	147.50	295.00	100.0%	162.20	10.0%
75,000	210.00	420.00	100.0%	234.70	11.8%
100,000	272.50	545.00	100.0%	307.20	12.7%
125,000	335.00	670.00	100.0%	379.70	13.3%
150,000	397.50	795.00	100.0%	452.20	13.8%
175,000	460.00	920.00	100.0%	524.70	14.1%
200,000	522.50	1,045.00	100.0%	597.20	14.3%



**ENGINEERING REPORT FOR  
APPALOOSA WATER COMPANY**

**Docket Nos. W-03443A-08-0177  
(Financing) & W-03443A-08-0313 (Rates)**

By Del Smith

**December 8, 2008**

**CONCLUSIONS**

1. Staff concludes that Appaloosa Water Company's ("Appaloosa" or "Company") system well production and storage capacities are adequate to serve the present customer base and up to 279 service connections. Staff further concludes that it can reasonably be expected that Appaloosa will develop needed storage and production to serve its CC&N area when needed.
2. Based on an Arizona Department of Environmental Quality ("ADEQ") Compliance Status Report, dated May 9, 2008, the system has major deficiencies in monitoring and reporting requirements for arsenic. The system's running annual average has exceeded the maximum contaminate level ("MCL") for arsenic. Because of these monitoring and reporting deficiencies, ADEQ cannot determine if this system is currently delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.
3. Appaloosa's service area is located within the Prescott Active Management Area ("AMA"). Appaloosa is in compliance with Prescott AMA reporting requirements and Arizona Department of Water Resources ("ADWR's") requirements governing water providers and/or community water systems.
4. A check of the Compliance Section database showed that the Company had no delinquent Commission compliance issues.
5. The Company has an approved curtailment tariff that became effective on May 13, 2006.
6. With regard to Appaloosa's request for financing approval to fund the purchase and installation of arsenic treatment plant, Staff concludes that the proposed plant is appropriate and the estimated costs appear to be reasonable. However, this does not imply any particular future treatment for rate base. No "used and useful" determination of the proposed plant was made, and no conclusions should be inferred for rate making or rate base purposes

## RECOMMENDATIONS

1. The Company has been reporting data for water pumped in its Annual Reports that is not based on actual data read at the well meter but instead is the same quantity as reported for gallons sold. Therefore, Staff cannot determine the actual level of non-account water from the Company's Annual Reports. Staff recommends that the Company be required to report the actual water pumped data, as read at the well meter, on a monthly basis in future Annual Reports, beginning with the 2008 Annual Report filed in 2009.
2. Staff recommends that the Company monitor the Appaloosa water system and submit the gallons pumped and sold to determine the non-account water for one full year. The Company should coordinate when it reads the well meters each month with customer billing so that an accurate accounting is determined. The results of this monitoring and reporting shall be docketed as a compliance item in this case within 13 months of the effective date of the order issued in this proceeding. If the reported water loss is greater than 10 percent the Company shall prepare a report containing a detailed analysis and plan to reduce water loss to 10 percent or less. If the Company believes it is not cost effective to reduce the water loss to less than 10 percent, it should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted, shall be docketed as a compliance item within 13 months of the effective date of the order issued in this proceeding.
3. Staff recommends that the Company file with Docket Control, as a compliance item in this docket, within 90 days of the effective date of the order in this matter, the certificate of Approval of Construction ("AOC") for the arsenic treatment plant. Staff further recommends that any permanent rate increase granted in this case become effective on the first day of the month after the Company files with Docket Control, as a compliance item in this docket, ADEQ documentation reporting that there are no compliance deficiencies and the Company is delivering water that meets the water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.
4. Staff recommends an annual water testing expense of \$1,579 be used for purposes of this application and further recommends that the remaining \$1,433 of the reported \$3,012 be classified as part of the water operator's fee.
5. Staff has developed typical and customary depreciation rates within a range of anticipated equipment life. These rates are presented in Table B. Staff recommends that the Company use these depreciation rates by individual NARUC category in the future.
6. Staff recommends that the Service Line and Meter Installation Charges listed under "Staff's Recommendation" in Table C be adopted.
7. On November 4, 2008, the Company filed a backflow prevention tariff based on Staff's backflow prevention tariff template posted on the Commission's website. Staff



recommends that this tariff be approved. Staff further recommends that the Company file the tariff with Docket Control, as a compliance item in this docket, within 45 days after the effective date of the decision in this case.

8. Staff recommends that the Company file with Docket Control, as a compliance item in this docket, the Certificate of AOC issued by ADEQ or Yavapai County for the waterline extension across Road 4 North at Harrison Drive by December 31, 2009.

## TABLE OF CONTENTS

	<u>PAGE</u>
<b>A. INTRODUCTION AND LOCATION OF COMPANY .....</b>	<b>1</b>
<b>B. DESCRIPTION OF THE WATER SYSTEM .....</b>	<b>1</b>
FIGURE 1. COUNTY MAP .....	4
FIGURE 2. CERTIFICATED AREA.....	5
<b>C. WATER USE .....</b>	<b>7</b>
<u>WATER SOLD</u> .....	7
FIGURE 4. WATER USE.....	7
<u>NON-ACCOUNT WATER</u> .....	7
<u>SYSTEM ANALYSIS</u> .....	8
<b>D. GROWTH .....</b>	<b>8</b>
FIGURE 5. GROWTH PROJECTION.....	9
<b>E. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (“ADEQ”) COMPLIANCE.....</b>	<b>9</b>
<u>COMPLIANCE</u> .....	9
<u>WATER TESTING EXPENSE</u> .....	10
TABLE A. WATER TESTING COST.....	10
<b>F. ARIZONA DEPARTMENT OF WATER RESOURCES (“ADWR”) COMPLIANCE .....</b>	<b>10</b>
<b>G. ARIZONA CORPORATION COMMISSION COMPLIANCE.....</b>	<b>11</b>
<b>H. DEPRECIATION RATES .....</b>	<b>11</b>
TABLE B. DEPRECIATION RATE TABLE FOR WATER COMPANIES .....	12
<b>I. OTHER ISSUES .....</b>	<b>12</b>
1. <u>SERVICE LINE AND METER INSTALLATION CHARGES</u> .....	12
TABLE C. SERVICE LINE AND METER INSTALLATION CHARGES .....	13
2. <u>CURTAILMENT TARIFF</u> .....	13
3. <u>BACKFLOW PREVENTION TARIFF</u> .....	13
4. <u>WATERLINE EXTENSION ACROSS ROAD 4 NORTH AT HARRISON DRIVE</u> .....	14
5. <u>SALE OF LOT 20</u> .....	14
6. <u>FINANCING APPLICATION TO FUND ARSENIC TREATMENT</u> .....	15

## **A. INTRODUCTION AND LOCATION OF COMPANY**

On March 26, 2008, Appaloosa Water Company ("Appaloosa" or "Company") filed a request for financing approval to construct an arsenic treatment facility with the Arizona Corporation Commission ("ACC" or "Commission"). On June 20, 2008, Appaloosa filed an application with the Commission to increase its rates, needed in part, according to the Company, to cover increased expenses associated with the arsenic treatment facility the Company was constructing. The ACC Utilities Division Staff ("Utilities Staff") engineering review and analysis of both applications is presented in this report.

Appaloosa serves the Appaloosa Meadows subdivision within the Town of Chino Valley. Figure 1 shows the location of the Company within Yavapai County and Figure 2 shows the Certificate of Convenience and Necessity ("CC&N") covering approximately two-thirds of a square-mile. Appaloosa also serves contiguous parcels covering roughly 60 acres (Two Parcels) north of its CC&N.

## **B. DESCRIPTION OF THE WATER SYSTEM**

Del Smith and Charles Myhlhousen, with Utilities Staff, visited the Appaloosa water system on October 22, 2008, by in the accompaniment of Joseph Cordovana, the Company's President. The Company's current certified operator changed mid test year 2007. The current operator is Kimble McClymonds, the owner of Yavapia Water Production.<sup>1</sup> Mr. McClymonds was present at the Booster Pump Station during Staff's inspection.

The water system consists of two wells, one storage tank, a Booster Pump Station equipped with two booster pumps a pressure tank and fire pump, and a distribution system serving 237 customers as of year end 2007. A water system schematic is shown as Figure 3 and Table A includes a detailed plant facility listing.

---

<sup>1</sup> Joseph Fiano, the owner of Water Treatment Operators was the Company's certified operator prior to Mr. McClymonds.

Table A. Plant Facilities Summary<sup>2</sup>

**Well Data**

	Well No 1	Well No. 2	Well No. 3 (Note 1)
ADWR ID No.	55-607274	55-607273	55-607272
Casing Size	16 inches	12 inches	16 inches
Casing Depth	665 feet	260 feet	200 feet
Pump Size in Horsepower (Hp)	7.5 Hp	10 Hp	na
Pump Yield in Gallons Per Minute (GPM)	125 GPM	175 GPM	na
Meter Size	6 inch	6 inch	na
Year Drilled	1966	2003	1942

Notes:

1) This well is not in use and has been capped.

**Storage, Pumping & Structures**

Structure or Equipment	Location	Quantity and Capacity
Pumps	Well Site #1 (Booster Pump Station)	1- 10 Hp (Spare for back-up) 2 -10 Hp (Booster Pumps) 1- 100 Hp (Fire Pump)
Pressure Tank	Booster Pump Station	1 – 5,500 gallon
Storage Tank (38' Diameter x 8' Height)	Booster Pump Station	1- 65,000 gallon
28'x 24' Pump House (Note 1)	Booster Pump Station	1
60' x 140 ' Slump Block Wall with iron entry gate (Note 2)	Booster Pump Station	1
Arsenic Treatment System AdEdge APU (Notes 3 & 4)	Booster Pump Station	1 – 200 GPM

Notes:

1) Houses Booster Pumps, Pressure Tank and Fire Pump.

2) Fence surrounding the Booster Pump Station.

3) AdEdge Adsorption Package Unit (APU); Capacity: Up to 200 GPM

4) Construction had been completed at the time of Staff's inspection. The Company was conducting system tests needed for final regulatory approval.

<sup>2</sup> Based on the Company's application and Staff's site visit.

**Distribution Mains**

Diameter	Material	Length
8 inches	PVC	5,395 feet
6 inches	PVC	22,933 feet
4 inches	PVC	1,657 feet
2 inches	PVC	3,589 feet

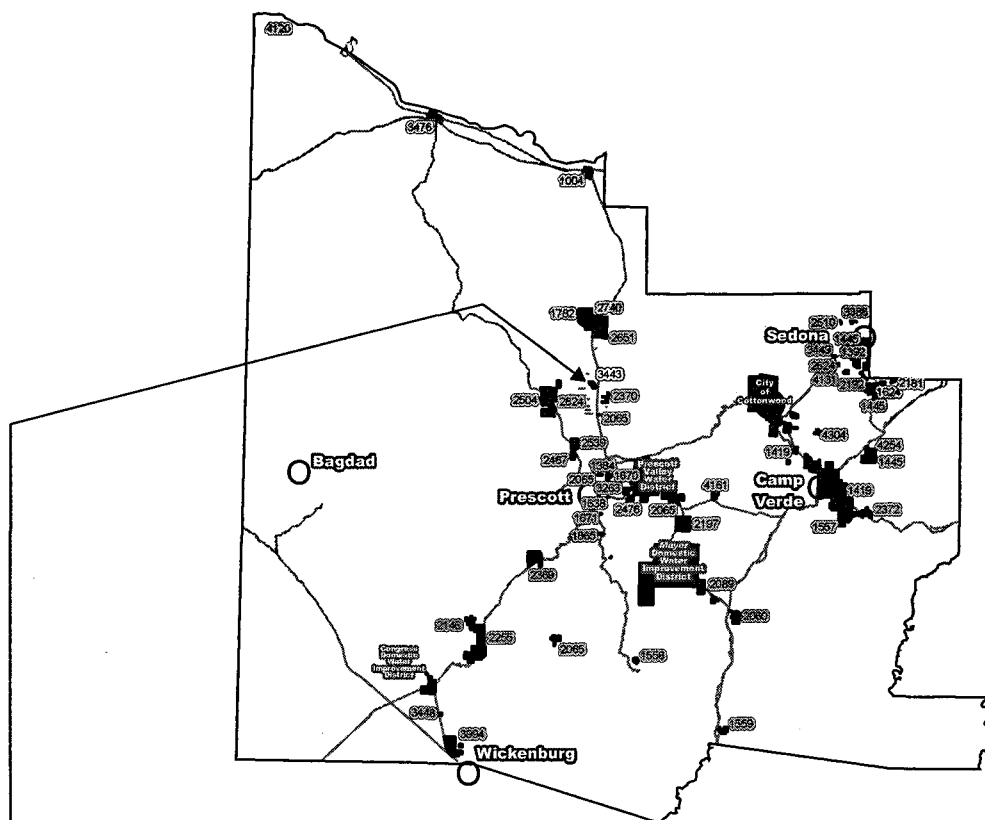
**Meters**

Size	Quantity
5/8 x 3/4 inch	191
1 inch	45

**Fire Hydrants**

Size/Description	Quantity
Standard	26

# YAVAPAI COUNTY

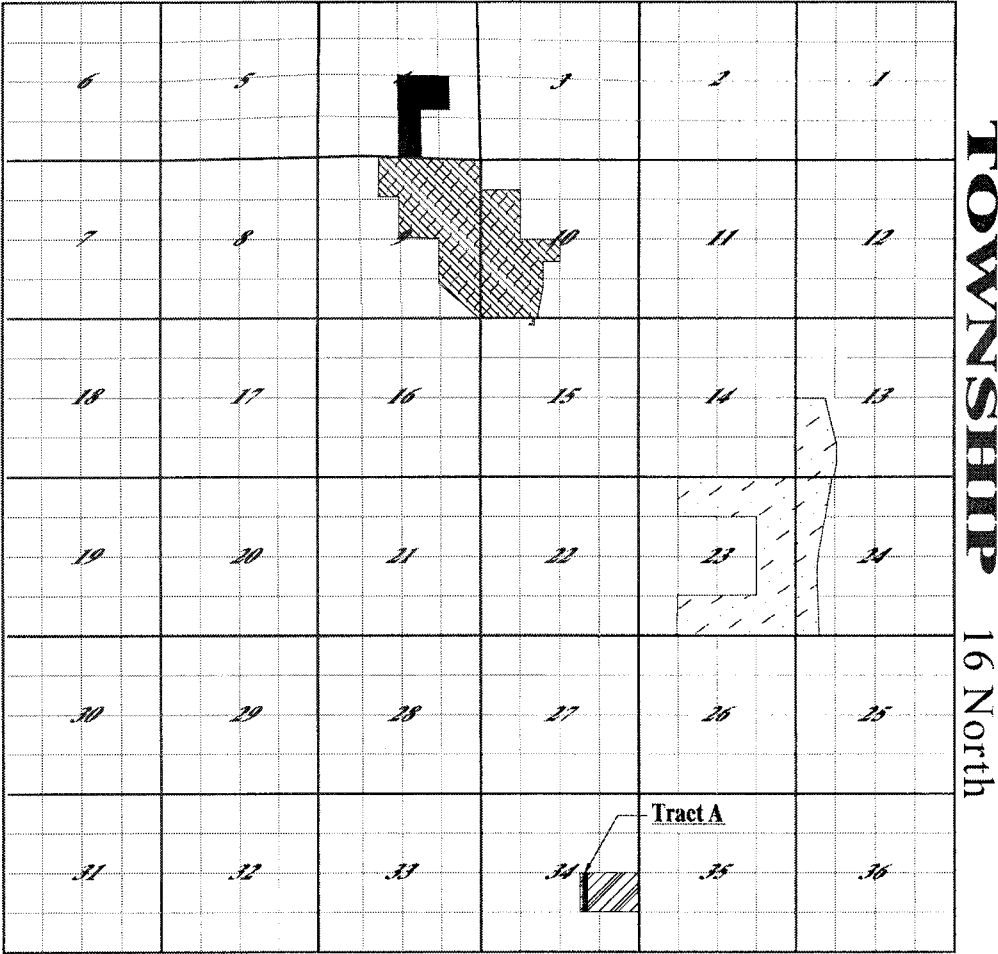


- |   |   |
|---|---|
| 1782 ABRA WATER COMPANY, INC.                     | 1638 HOLIDAY HILLS WATER COMPANY                    |
| 2740 ANTELOPE LAKES WATER COMPANY                 | 2197 HUMBOLDT WATER SYSTEM, INC.                    |
| 3443 APPALOOSA WATER COMPANY                      | 2824 ICR WATER USERS ASSOCIATION                    |
| 1445 ARIZONA WATER COMPANY                        | 2624 MICHAELS RANCH WATER USERS' ASSOCIATION        |
| 1004 ASHFORK DEVELOPMENT ASSOCIATION, INC.        | 2651 JUNIPER WELLS WATER COMPANY                    |
| 3476 BN LEASING CORPORATION                       | 1557 LAKE VERDE WATER COMPANY                       |
| 1624 BIG PARK WATER COMPANY                       | 2192 LITTLE PARK WATER COMPANY, INC.                |
| 2510 BOYNTON CANYON ENCHANTMENT HOMEOWNERS ASSOC. | 2245 LOMA ESTATES WATER COMPANY                     |
| 2089 BRADSHAW MOUNTAIN VIEW WATER COMPANY         | 2504 MEADOW WATER COMPANY                           |
| 2476 BRADSHAW WATER COMPANY, INC.                 | 4254 MONTEZUMA RIMROCK WATER COMPANY, LLC           |
| 1419 CAMP VERDE WATER SYSTEM                      | 4304 OAK CREEK PUBLIC SERVICE, LLC                  |
| 3994 CDC WICKENBURG WATER, LLC                    | 1392 OAK CREEK WATER COMPANY NO. 1                  |
| 2370 CHINO MEADOWS II WATER COMPANY, INC.         | 2146 PEEPLES VALLEY WATER COMPANY                   |
| 1559 COLDWATER CANYON WATER COMPANY               | 2181 PINE VALLEY WATER COMPANY                      |
| 2060 CORDES LAKES WATER COMPANY                   | 3448 RAINBOW PARKS, INC.                            |
| 4131 CROSS CREEK RANCH WATER COMPANY              | 3449 SEDONA VENTURE (MHC OPERATING LTD PARTNERSHIP) |
| 1558 CROWN KING WATER COMPANY, INC.               | 3388 SEVEN CANYONS WATER COMPANY                    |
| 1384 DELL'S WATER COMPANY, INC.                   | 1671 SHERMAN PINES WATER COMPANY                    |
| 3263 DIAMOND VALLEY WATER USERS ASSOCIATION       | 2372 VERDE LAKES WATER CORPORATION                  |
| 4120 GRAND CANYON CAVERNS AND INN, LLC            | 2369 WALDEN MEADOWS COMMUNITY COOPERATIVE           |
| 1670 GRANITE DELLS WATER COMPANY                  | 4161 WHITE HORSE RANCH OWNERS ASSOCIATION, INC.     |
| 2467 GRANITE MOUNTAIN WATER COMPANY, INC.         | 2065 WILHOIT WATER COMPANY, INC.                    |
| 2539 GRANITE OAKS WATER USERS ASSOCIATION         | 2255 YARNELL WATER IMPROVEMENT ASSOCIATION          |
| 1865 GROOM CREEK WATER USERS ASSOCIATION          |   |

Figure 1. County Map

**COUNTY:** *Yavapai*

**RANGE** 2 West







-  W-3443 (1)  
Appaloosa Water Company
-  W-2370 (1)  
Chino Meadows II Water Company, Inc.
-  W-2065 (6)  
Wilhoit Water Company, Inc.  
(Yavapai Estates System)
-  Appaloosa Water - Contiguous Area

Figure 2. Certificated Area

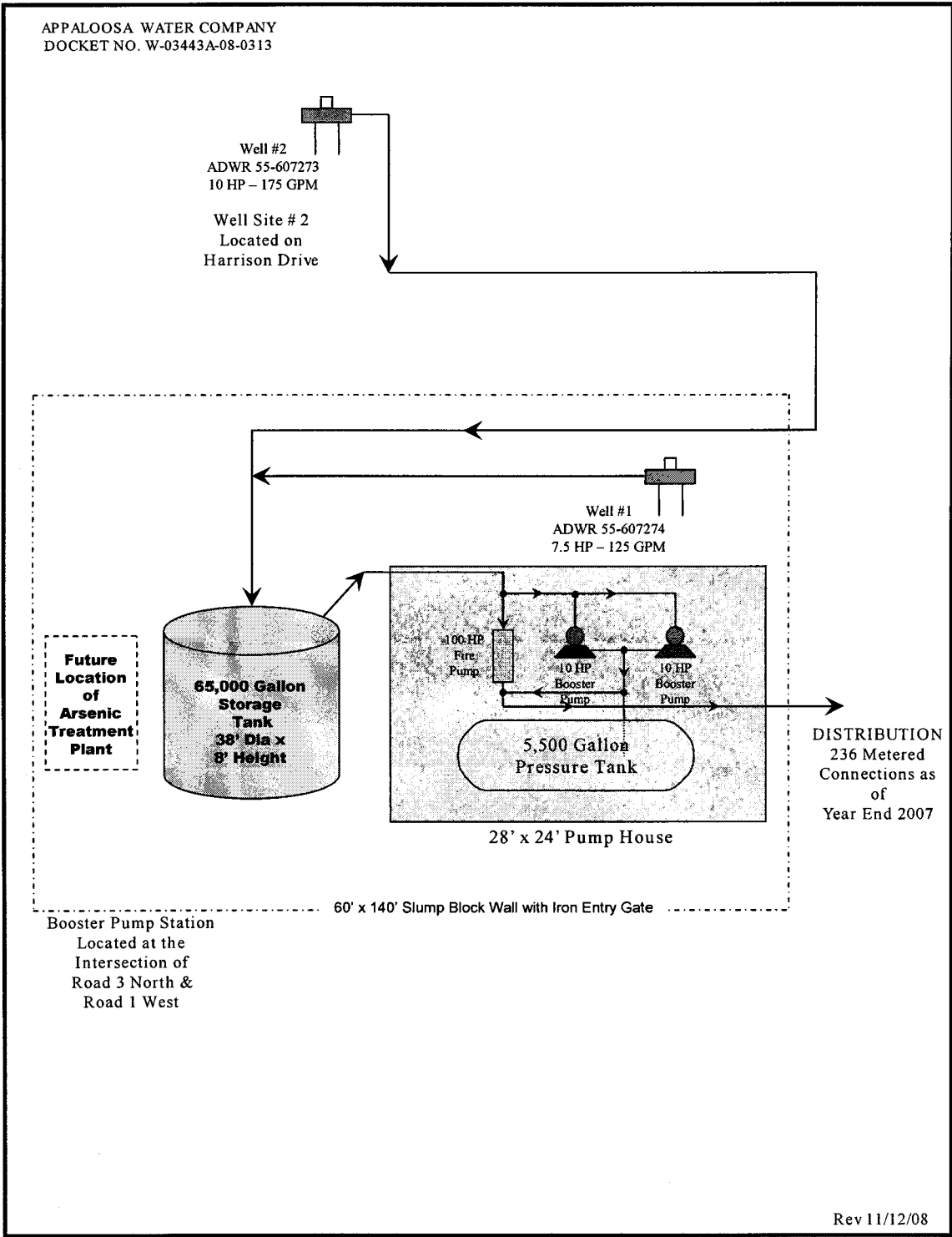


Figure 3. System Schematic



## C. WATER USE

### Water Sold

Figure 4 presents the water consumption data provided by the Company for the test year ending December 31, 2007.<sup>3</sup> Customer consumption included a high monthly water use of 443 gallons per day (“GPD”) per connection in August, and a low water use of 198 GPD per connection in March. The average annual use was 315 GPD per connection.

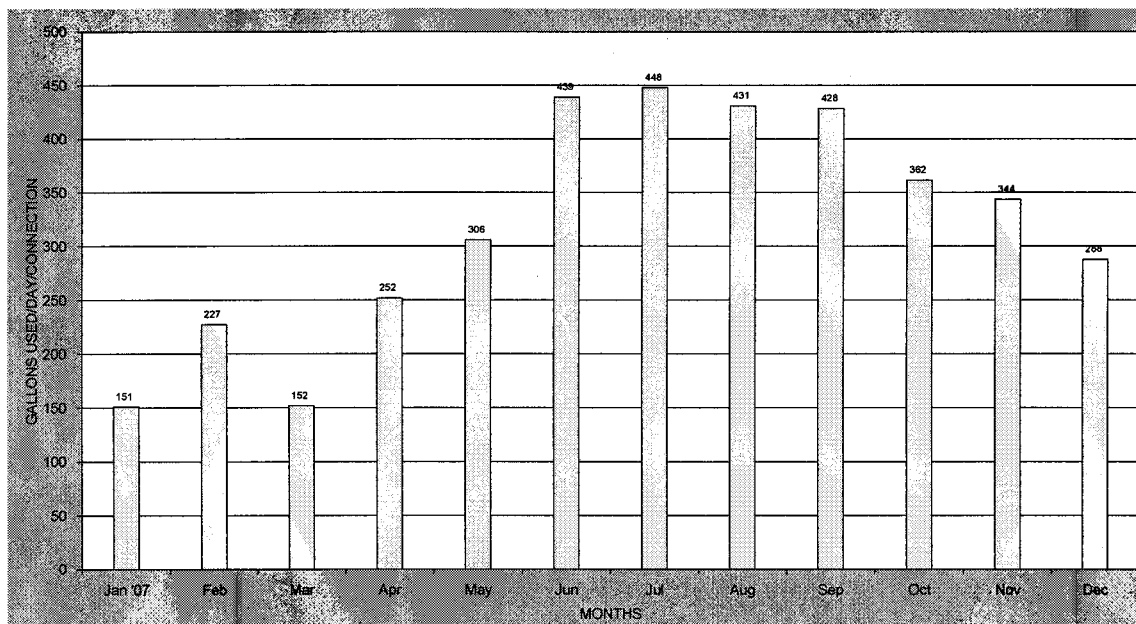


Figure 4. Water Use

### Non-Account Water

Non-account water should be 10 percent or less. It is important to be able to reconcile the difference between water sold and the water produced by the source. A water balance will allow a company to identify water and revenue losses due to leakage, theft and flushing. The Company reported 27,648,501 gallons pumped and 27,583,509 gallons sold for the test year, resulting in a water loss of .24 percent, which is well within the recommended threshold amount of 10 percent. According to information provided by the Company the amount of water pumped was derived and not based on monthly data read at the well meter therefore the amount of non-account water reported by the Company may not be accurate.<sup>4</sup>

<sup>3</sup> Based on an amended water use data sheet provided in response to Staff's Data Request CM 5.2 received on October 9, 2008.

<sup>4</sup> See Company response dated October 20, 2008, to Staff Data Request DS 7.2.

The Company has been reporting data for water pumped in its Annual Reports that is not based on actual data read at the well meter but instead is the same quantity as reported for gallons sold. Therefore, Staff cannot determine the actual level of non-account water from the Company's Annual Reports. Staff recommends that the Company be required to report the actual water pumped data as read at the well meter on a monthly basis in future Annual Reports, beginning with the 2008 Annual Report filed in 2009.

Staff recommends that the Company monitor the Appaloosa water system and submit the gallons pumped and sold to determine the non-account water for one full year. The Company should coordinate when it reads the well meters each month with customer billing so that an accurate accounting is determined. The results of this monitoring and reporting shall be docketed as a compliance item in this case within 13 months of the effective date of the order issued in this proceeding. If the reported water loss is greater than 10 percent the Company shall prepare a report containing a detailed analysis and plan to reduce water loss to 10 percent or less. If the Company believes it is not cost effective to reduce the water loss to less than 10 percent, it should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted, shall be docketed as a compliance item within 13 months of the effective date of the order issued in this proceeding.

#### System Analysis

Based on the data provided by the Company, the system's well production capacity is 300 GPM and total storage capacity is 65,000 gallons. There are fire hydrants in the distribution system. The system had 236 connections as of December 2007.<sup>5</sup> Staff concludes that the system's well production and storage capacities are adequate to serve the present customer base and up to 279 service connections.<sup>6</sup> Staff further concludes that it can reasonably be expected that Appaloosa will develop needed storage and production to serve its CC&N area when needed.

#### **D. GROWTH**

Figure 5 details the customer growth using linear regression analysis. The number of service connections was obtained from annual reports submitted to the Commission. During the test year 2007, the Company had 237 metered customers and it is projected that the Company could have approximately 338 customers by 2012.

---

<sup>5</sup> The Company reported that as of July 31, 2008, there were 234 customers billed for water service.

<sup>6</sup> The 279 service connections equate to approximately two years of growth based on Staff's growth projection presented in Figure 5.

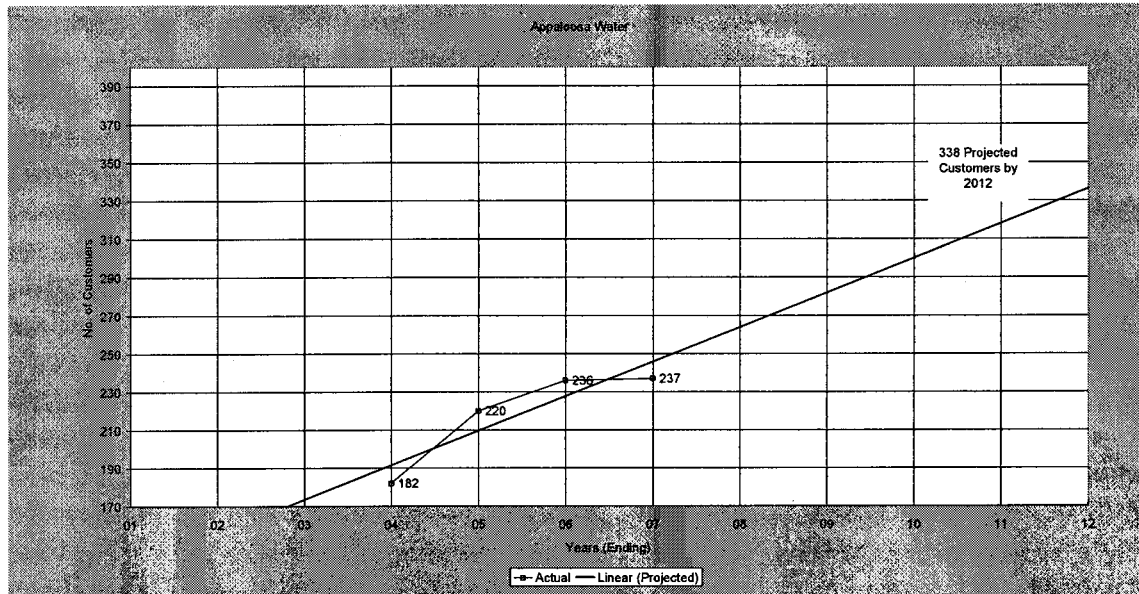


Figure 5. Growth Projection

#### E. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY ("ADEQ") COMPLIANCE

##### Compliance

ADEQ regulates the water system under ADEQ Public Water System I.D. #13-208. Based on a Compliance Status Report, dated May 9, 2008, the system has major deficiencies in monitoring and reporting requirements for arsenic. The system's running annual average has exceeded the maximum contaminate level ("MCL") for arsenic. The system will not be in compliance until the Company applies for an arsenic exemption and receives approval for the exemption to install arsenic treatment or in the alternative completes construction of an arsenic treatment plant and obtains a Certificate of Approval of Construction for this treatment plant. Because of these monitoring and reporting deficiencies, ADEQ cannot determine if this system is currently delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.

Staff recommends that the Company file with Docket Control, as a compliance item in this docket, within 90 days of the effective date of the order in this matter the Certificate of Approval of Construction for the arsenic treatment plant. Staff further recommends that any permanent rate increase become effective on the first day of the month after the Company files with Docket Control, as a compliance item in this docket, ADEQ documentation reporting that there are no compliance deficiencies and the Company is delivering water that meets the water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.

### Water Testing Expense

The Company is subject to mandatory participation in the Monitoring Assistance Program ("MAP"). Participation in the MAP program is mandatory for water systems, which serve less than 10,000 persons (approximately 3,300 service connections). Starting January 1, 2002, water companies paid a fixed \$250 per year fee, plus an additional fee of \$2.57 per service connection, regardless of meter size for participation in MAP.

The Company reported its water testing expense at \$3,012 during the test year by combining water testing costs and a portion of water operator's fees. Staff has reviewed the Company's testing expense and has recalculated the testing costs to remove non-water testing fees, and to add the omitted monitoring requirements for lead & copper.

Table A. Water Testing Cost

Monitoring	Cost per test	Quantity of tests per 3 years	Annual Cost
Total coliform (2 samples monthly)	\$30	72	\$720
MAP – IOCs, Radiochemical, Nitrate, Nitrite, Asbestos, SOCs, & VOCs	MAP	MAP	\$746
Lead & Copper	\$34	10	\$113
Total			<b>\$1,579</b>

Note: ADEQ's MAP invoice for the 2007 Calendar Year was \$746.01.

Staff recommends an annual water testing expense of \$1,579 be used for purposes of this application and further recommends that the remaining \$1,433 of the reported \$3,012 be classified as part of the water operator's fee.<sup>7</sup>

### **F. ARIZONA DEPARTMENT OF WATER RESOURCES ("ADWR") COMPLIANCE**

Appaloosa's service area is located within the Prescott Active Management Area ("AMA"). Appaloosa is in compliance with Prescott AMA reporting requirements and ADWR's requirements governing water providers and/or community water systems.<sup>8</sup>

<sup>7</sup> The current certified operator has informed the Company that once the arsenic system is in production his charges will increase to \$475 per month (certified operator fees reported for the latter half of the test year averaged \$200 per month).

<sup>8</sup> Per ADWR Water Provider Compliance Status Report received November 14, 2008.

#### **G. ARIZONA CORPORATION COMMISSION COMPLIANCE**

A check of the Utilities Staff Compliance Section database showed that the Company had no delinquent Commission compliance issues.<sup>9</sup>

#### **H. DEPRECIATION RATES**

For purposes of this rate application the Company used depreciation rates per National Association of Regulatory Utility Commissioners ("NARUC") plant category that were the same or lower than the rates typically recommended by Staff except in the case of hydrants where the Company used a higher rate. Staff has developed typical and customary depreciation rates within a range of anticipated equipment life. These rates are presented in Table B and it is recommended that the Company use these depreciation rates by individual NARUC category.

---

<sup>9</sup> Per Compliance Section email dated November 14, 2008.

Table B. Depreciation Rate Table for Water Companies

NARUC Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (percent)
304	Structures & Improvements	30	3.33
305	Collecting & Impounding Reservoirs	40	2.50
306	Lake, River, Canal Intakes	40	2.50
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2.00
310	Power Generation Equipment	20	5.00
311	Pumping Equipment	8	12.5
320	Water Treatment Equipment		
320.1	Water Treatment Plants	30	3.33
320.2	Solution Chemical Feeders	5	20.0
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	5	20.00
341	Transportation Equipment	5	20.00
342	Stores Equipment	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00
344	Laboratory Equipment	10	10.00
345	Power Operated Equipment	20	5.00
346	Communication Equipment	10	10.00
347	Miscellaneous Equipment	10	10.00

## I. OTHER ISSUES

### 1. Service Line and Meter Installation Charges

The Company has requested changes in its service line and meter installation charges. These charges are refundable advances and the Company requested charges are higher than

Staff's customary range of charges. It appears that the Company simply doubled the existing rates for every size and type of meter. Staff recommends the upper end of its customary range of charges. Staff believes its recommended charges listed below are more reflective of current costs than the Company's proposed charges. Since the Company may at times install meters on existing service lines, it would be appropriate for some customers to only be charged for the meter installation. Therefore, separate service line and meter charges have been developed by Staff. Staff recommends that the charges listed under "Staff's Recommendation" in Table C be adopted.

Table C. Service Line and Meter Installation Charges

Meter Size	Company Current Tariff	Company Proposed	Staff's Recommendation		
			Service Line Charge	Meter Charge	Total Charge
5/8 x 3/4-inch	\$400	\$800	\$445	\$155	\$600
3/4-inch	\$440	\$880	\$445	\$255	\$700
1-inch	\$500	\$1000	\$495	\$315	\$810
1-1/2-inch	\$715	\$1,430	\$550	\$525	\$1,075
2-inch Turbine	\$1,170	\$2,340	\$830	\$1,045	\$1,875
2-inch Comp	\$1,700	\$3,400	\$830	\$1,890	\$2,720
3-inch Turbine	\$1,585	\$3,170	\$1,045	\$1,670	\$2,715
3-inch Comp	\$2,190	\$4,380	\$1,165	2,545	\$3,710
4-inch Turbine	\$2,540	\$5,080	\$1,490	\$2,670	\$4,160
4-inch Comp	\$3,215	\$6,430	\$1,670	\$3,645	\$5,315
6-inch Turbine	\$4,815	\$9,630	\$2,210	\$5,025	\$7,235
6-inch Comp	\$6,270	\$12,540	\$2,330	\$6,920	\$9,250

## 2. Curtailment Tariff

The Company has an approved curtailment tariff that became effective on May 13, 2006.

## 3. Backflow Prevention Tariff

On November 4, 2008, the Company filed a backflow prevention tariff based on Staff's backflow prevention tariff template posted on the Commission's website.<sup>10</sup> Staff recommends that this tariff be approved. Staff further recommends that the Company file the tariff with Docket Control, as a compliance item in this docket, within 45 days after the effective date of the decision in this case.

<sup>10</sup> The Company filed its proposed tariff in Docket No. W-03443A-08-0313.

#### 4. Waterline Extension across Road 4 North at Harrison Drive

ADEQ issued a Notice of Opportunity to Correct ("NOC") to Appaloosa on May 27, 2008, regarding the subject waterline extension.<sup>11</sup> According to the NOC the alleged violations were 1) failure to obtain an Approval to Construct ("ATC") prior to beginning construction of a waterline extension and 2) failure to obtain an AOC before operation of a newly constructed water line. ADEQ became aware of the alleged violations after it received an email from the Town of Chino Valley and reviewed the facility files at ADEQ.

Apparently the waterline in question was installed by the contractor in a manner that did not meet ATC specifications and requirements. According to the Company an ATC for the Waterline extension had been issued by Yavapai County prior to the lines construction. However, the line was installed by boring under the road bed as opposed to opening a trench and installing the water line inside a sleeve as specified in the Certificate of ATC issued by the County. Allegedly the contractor failed to flush, chlorinate and test the new line as required. Staff understands that recent tests have been conducted to ensure safe water is being delivered.

Staff recommends that the Company take immediate action to bring the waterline into compliance with the Certificate of ATC issued by the County. Once the waterline has been installed in the manner required, the Company can seek to obtain the Certificate of AOC and bring its water system into compliance. Staff further recommends that the Company file with Docket Control, as a compliance item in this docket, the Certificate of AOC issued by ADEQ or Yavapai County for the waterline extension across Road 4 North at Harrison Drive by December 31, 2009.

The waterline extension across Road 4 North at Harrison Drive serves Appaloosa customers (a nursery and club house) in a portion of the SE ¼ of Section 4 in T-16-N, R-2-W, identified more specifically as Parcel "B". In a letter dated November 16, 2006, Appaloosa notified Staff that per A.A.C. Rule R14-2-402 (C) that it was extending service to two parcels identified as Parcel A and Parcel B and that both were contiguous to the Company's CC&N. Using a metes and bounds legal description for each Parcel Staff verified that each Parcel is contiguous to the Company's CC&N as required.

#### 5. Sale of Lot 20

Well No. 2 is located on Lot 20 in the Appaloosa Meadows Phase II Subdivision, Yavapai County. Appaloosa provided Staff with a copy of the Warranty Deed wherein the real property containing Well No. 2 was transferred (sold) by the Company. The Company also

---

<sup>11</sup> The NOC is an informal compliance assurance tool used to put a responsible party on notice that ADEQ believes a non-significant violation of an environmental law has occurred. The NOC provides the responsible party (in this case Appaloosa) an opportunity to resolve the violation or deficiency before ADEQ takes formal action. A Notice of Violation may be issued if the violation is not corrected within 180 days.



provided Staff with copies of the Plat Map<sup>12</sup> showing the recorded easement. The easement appears to be adequate at least for the Company to gain access to perform routine maintenance and to read the well meter. It does not appear that the operation and maintenance of Well No. 2 within the easement violates any ACC or ADEQ rule or regulation as long as the Company has access to the well whenever it is needed.

#### 6. Financing Application to Fund Arsenic Treatment

On March 26, 2008, Appaloosa filed a request for financing, the Company plans to use the funds, if approved by the Commission, to construct an arsenic treatment facility to reduce the level of arsenic in its water supply.<sup>13</sup> Appaloosa has two wells which supply water to the system. According to data included in the Company 2007 Annual Report filed with the Commission, the level of arsenic for each well is 16 parts per billion ("ppb") which exceeds the new standard of 10 ppb.

Based on an ADEQ Compliance Status Report, dated May 9, 2008, the Appaloosa water system has major deficiencies in monitoring and reporting requirements for arsenic. The system's running annual average has exceeded the MCL for arsenic. The system will not be in compliance until the Company applies for an arsenic exemption and receives approval for the exemption to install arsenic treatment or in the alternative completes construction of an arsenic treatment plant and obtains a Certificate of AOC for this treatment plant.

Appaloosa entered into a turnkey agreement with AdEdge to install an arsenic treatment reduction system at the Company's Well Site #1 (aka Booster Pump Station).<sup>14</sup> Construction of the arsenic treatment plant has been completed and is undergoing final testing. The Company expects to receive its certificate of AOC for the plant by year end 2008.

Staff concludes that the proposed arsenic treatment plant is appropriate and the estimated costs appear to be reasonable. However, this does not imply any particular future treatment for

---

<sup>12</sup> According to the Plate of Record in Book 42 of Maps, Pages 63-65, Records of Yavapai County, Arizona.

<sup>13</sup> On January 3, 2008, Appaloosa filed a funding request with the Water Infrastructure Finance Authority of Arizona ("WIFA"). The amount requested from WIFA was \$225,000. Appaloosa was ranked no. 11 for funding on WIFA's 2008 priority list.

<sup>14</sup> AdEdge is on ADEQ's approved list of vendors for arsenic removal equipment. It is Staff's understanding that the AdEdge system proposed for Appaloosa is proven technology. ADEQ has previously approved this treatment process for use in other parts of the State.

## ATTACHMENT B

### ACRM Tutorial

**The purpose of this workbook is to provide guidance in the filing on an ACRM step one filing. It is not meant to be all inclusive. It does not necessary reflect the ACC's position on filing. It cannot be relied on exclusively as the one definitive source for all ACRM information.**

#### What is an ACRM filing?

When the EPA released its new arsenic guidelines on January 23, 2001, it was clear that public utilities would need a means to comply with the new requirements. Typically new rates are only obtained during the rate application process. Rather than have 400 water companies all file rate cases, the Commission saw the need to give utilities the ability to finance arsenic remediation efforts outside of a rate case in a more time efficient manner. Thus, the Arsenic Cost Recovery Mechanism (ACRM) was born.

#### What does an ACRM achieve?

The ACRM gives utilities the means to recover costs related to the remediation of arsenic contamination. An ACRM can only be approved for arsenic related costs and not the drilling of a new well or the installation of a storage tank, for example. The ACRM is designed to give utilities the means to recover arsenic related expenditures necessary to comply with EPA regulations.

#### What does a company need (document wise) to file an ACRM?

The Company will need to produce the following:

Current Balance Sheet	(for company, not consolidated)	schedule 1
Current Income Statement	(for company, not consolidated)	schedule 2
A schedule of arsenic related expenditures (e.g. CWIP Ledger)		schedule 8

#### What important calculations will the Company need to make?

Annual operating margin	schedule 3
Depreciation on Arsenic Plant	schedule 5
Effect on tax liabilities due to arsenic related expenditures	schedule 5
Gross Revenue Conversion Factor	schedule 5
Arsenic Surcharge Requirement	schedule 5
Comparison of water sold in test year versus current period	schedule 6
Comparison of rate base in test year to period including arsenic plant	schedule 7
The typical bill analysis for residential customers	schedule 9

Wilhoit Water Company  
Yavapai Mobile Home Estates ACRM Step 1  
Docket No. W-02065A-07-0311, et.al.

### **List of Schedules**

The following **EXAMPLE** schedules supply the necessary information required by Staff to arrive at the required ACRM surcharge.

**Please note:** The figures in the following schedules are for illustrative purposes only. They are not intended to reflect any actual balances.

1. Balance Sheet - The most recent balance sheet for the at the time of filing the ACRM request.
2. Income Statement - The most recent income statement.
3. Earnings Test - An earning test calculation. Purpose is to assure that the Company's actual return including the arsenic surcharge does not exceed the authorized return.
- 3A. Earnings Test Adjustment Schedule - An earning test calculation with any adjustments that you may have to arrive at the corrected adjusted balance.
4. Rate Review Filing - A rate review calculation.
5. Arsenic Compliance Revenue Requirement - An arsenic compliance revenue requirement calculation. Purpose is to calculate the amount of the surcharge based on the capitalized arsenic plant components, depreciation, O&M expenses, etc.
6. Surcharge Calculation - A detailed calculation of the necessary surcharge. to cover the cost of the Plant in Service and the Depreciation expense associated with it. This schedule breaks out the surcharge equally between the monthly charge and the commodity charge.
7. Rate Base Calculation - A schedule showing the elements and the calculation of the rate base. The purpose of this schedule is to show the rate base balances as of the prior decision and the effect of the capitalized arsenic plant increases.
8. CWIP Ledger - A ledger showing the transactions recorded in the construction work in progress account. This balance is posted to Schedule 5.
9. Typical Bill Analysis - A schedule showing the ACRM impact on the Typical 5/8-inch Residential Customer monthly bill.

### **Sources:**

ACC Decision No. 66400 dated 10/14/03 docket No. W-01445A-00-0962  
ACC Decision No. 69181 dated 10/5/06 docket No. W-01303A-05-0280

ILLUSTRATION ONLY

Balance Sheet figures as the the most recent date prior to ACRM filing

		[A]	
Line			
No.	Description	Month Year Ending	
<u>ASSETS</u>			
1	Utility Plant in Service	\$	117,493
2	Accumulated Depreciation - Utility		(88,071)
3	Property Held for Future Use		-
4	Construction Work in Process		2,000
5	Subtotal Utility Plant	\$	31,422
6	Non-Utility Property		-
7	Accumulated Depreciation - Nonutility		-
8	Other Investments		-
9	Subtotal Non-Utility Property and Investments	\$	-
<u>Current Assets</u>			
10	Cash		500
11	Working Funds		-
12	Temporary Cash Investments		-
13	Customer Accounts Receivable		-
14	Notes Receivable		6,721
15	Plant Material & Supplies		-
16	Prepayments		-
17	Miscellaneous Current & Accrued Assets		3,070
18	Other		-
19	Total Current Assets	\$	10,291
<u>Deferred Debits</u>			
20	Debt and preferred stock		-
21	Expense of rate proceeding		-
22	Prelim survey & invest charges		500
23	Reg Asset-income tax recovery		-
24	Other		-
25	Total Deferred Debits	\$	500
26	Total Assets	\$	42,213
<u>CAPITAL AND LIABILITIES</u>			
27	Common Stock	\$	-
28	Paid in capital		-
29	Retained Earnings		9,151
30	Total Equity	\$	9,151
31	Preferred stock		-
32	Long term debt		-
33	Total Capitalization	\$	9,151
<u>Current Liabilities</u>			
34	Accounts Payable		200
35	Notes Payable (current portion)		25,000
36	Notes Payable to Associated Companies		1,000
37	Customer deposits		5,148
38	Taxes accrued		1,064
39	Accrued Interest		50
40	Miscellaneous current & accrued liabilities		600
41	Other		-
42	Subtotal Current Liabilities		33,062
43	Deferred Credits		-
44	Contributions in Aid of Construction		-
45	TOTAL CAPITAL AND LIABILITIES	\$	42,213

ILLUSTRATION ONLY

Income Statement for the most recent 12 months prior to ACRM filing

Line No.	Description	[A] Month Year Ending	[B] Adjustments Conforming to the Decision	[C] As Adjusted
1	Operating Revenues			
2	Metered Water Revenue	\$ 115,000		\$ 115,000
3	Unmetered Water Revenue	600		600
4	Other Water Revenue	500		500
5	<b>Total Operating Revenues</b>	<b>\$ 116,100</b>	<b>-</b>	<b>\$ 116,100</b>
6				
7	Operating Expenses			
8	Salaries & Wages	15,000		15,000
9	Purchased Water	-		-
10	Purchased Power	14,350		14,350
11	Chemicals	50		50
12	Repairs & Maintenance	30,000		30,000
13	Office Supplies & Expenses	3,000		3,000
14	Outside Services	2,500		2,500
15	Water Testing	10,300		10,300
16	Rents	6,600		6,600
17	Transportation Expenses	300		300
18	Insurance - General Liability	3,300		3,300
19	Insurance - Health & Life	-		-
20	Regulatory Commission Expense	-		-
21	Miscellaneous Expense	6,600	(1,200)	5,400
22	Total Maintenance & Operating Expenses	\$ 92,000	(1,200)	90,800
23	Depreciation & Amortization Expense	5,220		5,220
24	General Taxes	1,000		1,000
25	Income Taxes	500		500
26	<b>Total Operating Expenses</b>	<b>\$ 98,720</b>		<b>97,520</b>
27				
28	<b>UTILITY OPERATING INCOME / (LOSS)</b>	<b>\$ 17,380</b>		<b>\$ 18,580</b>
29				
30	Other Income / (Expense)			
31	Interest and Dividend Income	100		100
32	Non-Utility Income	-		-
33	Miscellaneous Non-Utility Expenses	-		-
34	Other Income / (Expense)	\$ 100		\$ 100
35				
36	Income Before Interest Charges	\$ 17,480		\$ 18,680
37	Interest Charges	1,000		1,000
38				
39	<b>Net Income</b>	<b>\$ 16,480</b>		<b>\$ 17,680</b>

**OPERATING ADJUSTMENT EXAMPLE**

	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENT	[C] STAFF AS ADJUSTED
40	Miscellaneous Expense	90,800	(1,200)	89,600

Please explain adjustment here. E.g. to remove lobbying expense disallowed by decision.

EXAMPLE ONLY

An earnings test calculation.

Line No.	Description	Month Year Ending
1	Operating Revenues	
2	Water Revenues	\$ 115,000
3	Sewer Revenues	50
4	Other Revenues	50
5	Total Operating Revenues	<u>\$ 115,100</u>
6		
7	Operating Expenses	
8	Maintenance Expense	92,000
9	Depreciation & Amortization	5,220
10	General Taxes (Sales, Property, etc.)	1,000
11	Income Taxes	500
12	Total Operating Expenses	<u>98,720</u>
13		
14	Utility Operating Income	<u>16,380</u>
15	Other Income / (Expenses)	<u>100</u>
16	Income Before Interest Charges	16,480
17	Interest Charges	1,000
18		
19	Net Income	<u><u>\$ 15,480</u></u>
20		
21	Authorized Operating Margin per Decision XXXXX	21.63%
22		
23	Actual Operating Margin	14.23%
24		
25	Over/ Under Authorized Operating Margin	-7.40%

**Wilhoit Water Company**  
**Yavapai Mobile Home Estates ACRM Step 1**  
Docket No. W-02065A-07-0311, et.al.

APPENDIX B  
ACRM Schedule 3  
Earnings Test  
ILLUSTRATION ONLY

Line No.	Description	[A] Month Year Ending	
		<u>Actual</u>	
1	Operating Revenues		
2	Total Operating Revenues	\$	115,100
3			
4	Operating Expenses		
5	Total Maintenance & Operations Expense		92,000
6	Depreciation & Amortization		5,220
7	General Taxes		1,000
8	Income Taxes		500
9	Total Operating Expenses		98,720
10			
11	Utility Operating Income		16,380
12			
13	Other Income		100
14			
15	Income Before Interest Charges		16,480
16			
17	Interest Charges		1,000
18			
19	Net Income	\$	15,480
20			
21	Rate Base - O.C.L.D. (2006 Test Year)		65,244
22			
23	Authorized ACRM Operating Margin per Decision		21.63%
24			
25	Actual ROR (Ln. 11 ÷ Ln. 21)		25.11%
26			
27	Actual Operating Margin (Ln. 11 ÷ Ln. 2)		14.23%
28			
29	Interest Coverage (Ln. 11 ÷ Ln. 8 ÷ Ln. 17)		16.88

Line No.	Description	ILLUSTRATION ONLY			
		[A] Per Decision XXXXX	[B] 12 Months Ended Month Year Ending Adjusted	[C] Arsenic1 Treatment Plant Increase	[D] Adjusted
1	Operating Revenues				
2	Total Operating Revenues	\$ 115,000	\$ 116,100	\$ -	\$ 116,100
3					
5	Total Maintenance & Operatings Expense	85,600	92,000		92,000
6	Depreciation & Amortization	4,000	5,220		5,220
7	General Taxes	8,000	1,000		1,000
8	Income Taxes	100	500		500
9	Total Operating Expenses	97,700	98,720	-	98,720
10					
11	Utility Operating Income	17,300	17,380	-	17,380
12					
13	Rate Base O.C.L.D. (Sch. 7 Ln. 32)	\$ 3,024	\$ 29,139	\$ 36,105	\$ 65,244
14					
15	Authorized ACRM Return on Equity per Decision	21.63%	21.63%	21.63%	21.63%
16					
17	Actual ROR (Ln. 11 ÷ Ln. 13)	572.09%	59.65%	0.00%	26.64%
18					
19	Operating Margin (Ln. 11 ÷ Ln. 2)	15.04%	14.97%	N/A	14.97%
20					
21	Interest Expense (synchronized interest)	\$ 88	\$ 845	\$ -	\$ 1,892
22					
23	Interest Coverage (Ln. 11 ÷ Ln. 8 ÷ Ln. 21)	198.41	21.16	N/A	9.45



EXAMPLE ONLY

[A]

Line No.		
1	Arsenic Plant Revenue Requirement	
2	Arsenic Plant in Service/Rate Base <sup>1</sup>	\$ 36,105
3	Less: Accumulated Depreciation	-
4	ACRM Rate Base	<u>\$ 36,105</u>
5	Depreciation rate <sup>2</sup>	5.00%
6	Depreciation expense	1,805
7	Depreciation expense net of tax savings	1,408
8	Recoverable O&M costs	-
9	Recoverable O&M costs net of tax savings <sup>3</sup>	<u>-</u>
10	Arsenic Operating Income	(1,408)
11	Rate of return	-3.90%
12	Required Operating Margin	21.63%
13	Required Operating Income	1,805
14	Operating Income deficiency	3,213
15	Gross revenue conversion factor <sup>4</sup>	<u>0.000</u>
16	Depreciation Expense Revenue deficiency	<u>\$ -</u>
17	Total Surcharge Requirement	<u><u>\$ 36,105</u></u>

<sup>1</sup> From Schedule 8 CWIP Ledger

<sup>2</sup> Use composite rate calculated from component rates by account

<sup>3</sup> Assumes a 22 percent combined state and federal income tax rate.

<sup>4</sup> GRCF =  $1/(1-\text{Tax Rate}) = 1/(1-.22) = 1.282$

**EXAMPLE ONLY**

Detailed calculation of Surcharge.

	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]
Line No.	Customers	Total Gallons Sold	Gallons Sold Per Cust.	Monthly Minimum	Minimum Multiples	Equivalent Meters	Monthly Fixed Increment	Annual Total
1	Month Year 1 (Year 1)	90	9,000,000	8.00	1.0	96	\$ 11.62	\$ 13,324
2	Month Year 2 (Year 2)	95	9,850,109	18.00	2.3	-	26.14	-
3	Year 2 minus Year 1	5	850,109	40.00	5.0	-	58.08	-
4	Percentage Change	5.56%	3.685	64.00	8.0	8	92.93	1,146
5	Avg Gallons (Col B Ln 1 + Col B Ln 2 + 2)	9.45%	3.69%	120.00	15.0	-	174.25	-
6				200.00	25.0	26	290.42	3,582
7				400.00	50.0	-	580.84	-
8				-	0.0	-	-	-
9				-	0.0	-	-	-
10				-	0.0	-	-	-
11				-	0.0	-	-	-
12				-	0.0	-	-	-
13				-	0.0	-	-	-
14				-	0.0	-	-	-
15				-	0.0	-	-	-
16				-	0.0	-	-	-
17				-	0.0	-	-	-
18				-	0.0	-	-	-
19				-	0.0	-	-	-
20				-	0.0	-	-	-
21				-	0.0	-	-	-
22				-	0.0	-	-	-
23				-	0.0	-	-	-
24				-	0.0	-	-	-
25				-	0.0	-	-	-
26				-	0.0	-	-	-
27				-	0.0	-	-	-
28				-	0.0	-	-	-
29				-	0.0	-	-	-
30				-	0.0	-	-	-
31				-	0.0	-	-	-
32				-	0.0	-	-	-
33				-	0.0	-	-	-
34				-	0.0	-	-	-
35				-	0.0	-	-	-
36				-	0.0	-	-	-
37				-	0.0	-	-	-
38				-	0.0	-	-	-
39				-	0.0	-	-	-
40				-	0.0	-	-	-
41				-	0.0	-	-	-
42				-	0.0	-	-	-
43				-	0.0	-	-	-
44				-	0.0	-	-	-
						130		18,053

Calculation of Surcharge								
Total costs to be recovered (Sch. 5 Col A Ln 13)	\$	36,105						
Minimum Revenue (Col B Ln 33 + 2)			\$	18,053				
Commodity Revenue (Col B Ln 33 + 2)							\$	18,053
Monthly Increment Per Equivalent Meter								
Equivalent Meters (Col F Ln 29 x 12 Months)								
Minimum Surcharge (Ln 34 + Ln 38)								
Average Gallons (Col B Ln 5)								
Commodity Surcharge (Ln 35 + Ln 42)								

Please Note: These are illustrative numbers only.

EXAMPLE ONLY

LINE NO.		[A] Per Decision XXXXX	[B] Arsenic Treatment Plant Increase	[C] Decision Plus Arsenic Treatment Plant	[D] Actual Balance Month Year Ending	[E] Arsenic Treatment Plant Increase	[F] Actual Balance Plus Arsenic Trtmt. Plant
1	Utility Plant						
2	Gross Utility Plant in Service	\$ 111,493	\$ 36,105	\$ 147,598	\$ 117,493	\$ 36,105	\$ 153,598
3	Accumulated Depreciation	(88,071)		(88,071)	(88,071)		(88,071)
4	Arsenic Removal Facilities	-		-			-
5	Accumulated Depreciation of Arsenic Plant	-		-			-
6							
7	Net Utility Plant in Service	\$ 23,422	\$ 36,105	\$ 59,527	\$ 29,422	\$ 36,105	\$ 65,527
8							
9	Deductions						
10	Advances in Aid of Construction	-		-	-		-
11	Imputed Regulatory Advances	-		-	-		-
12	Accum. Amortization of Regulatory AIAC	-		-	-		-
13	Contributions in Aid of Construction	20,000		20,000	-		-
14	Accum. Amortization of CIAC	(750)		(750)	(1,000)		(1,000)
15	Imputed Regulatory Contributions	-		-	-		-
16	Accum. Amortization of Regulatory CIAC	-		-	-		-
17	Arsenic Impact Fee Contributions	-		-	-		-
18	Accum. Amortization of AIF CIAC	-		-	-		-
19	Customer Meter Deposits	5,148		5,148	5,148		5,148
20	Deferred Income Taxes & Investment Tax Credits	-		-	-		-
21							
22	Total Deductions	\$ 24,398	\$ -	\$ 24,398	\$ 4,148	\$ -	\$ 4,148
23							
24	Additions						
25	Unamortized Finance Charges	-		-	-		-
26	Deferred Tax Assets	-		-	-		-
27	Allowance for Working Capital	4,000		4,000	3,865		3,865
28	Utility Plant Acquisition Adjustment	-		-	-		-
29							
30	Total Additions	\$ 4,000	\$ -	\$ 4,000	\$ 3,865	\$ -	\$ 3,865
31							
32	Total Rate Base	\$ 3,024	\$ 36,105	\$ 39,129	\$ 29,139	\$ 36,105	\$ 65,244
33							
34							
35							

Wilhoit Water Company  
Yavapai Mobile Home Estates ACRM Step 1  
Docket No. W-02065A-07-0311, et al.

This schedule shows work orders cross referenced to invoices and dates paid.  
These totals are put on Schedule 5, Revenue Requirement

EXAMPLE ONLY

CWIP Ledger Summary		CWIP Acct. (GLOBJ)										Total	
Line No.	Period Month (GLPN)	Work Order/ Subledger (GLSBL)	105050 - Accruals	105110 - History	105150 - M&S Purchases	105200 - Co. Labor	105260 - Overhead	105270 - Svc. Co. Charges	105275 - Contracted Services	105280 - Retainage Bldgs	105350 - AFUDC Debt	Total	
1	2006			(23,000)		395		(1,687)	16,169		1,131	(4,563)	
2		50028305	31,630	(30,556)						634	942	31,630	
3		50066421	-	(49,279)					(9,727)		2,221	(36,361)	
4		50072458	-						21,777			(21,164)	
5		50072461									77	218	
6		50028305				682	252	3,508	18,988		1,156	27,276	
7		50051122	10,191	(13,916)								10,191	
8		50066421					73		18,603	2,558	956	10,045	
9		50072458					498		30,000		2,270	36,974	
10		50072461					6				77	226	
11		50028305			435	1,306	746	6,793	3,114		1,230	16,967	
12		50051122	(40,958)									(40,958)	
13		50066421					205		37,289	3,213	1,021	43,621	
14		50072458					1,007		23,762		2,394	31,567	
15		50072461					6				78	228	
16			(853)									(853)	
17	2006 Total			(116,751)	485	2,384	2,792	8,615	159,975	8,405	13,553	104,464	
18	Total			(116,751)	485	2,384	2,792	8,615	159,975	8,405	13,553	104,464	

EXAMPLE ONLY

Residential 5/8-inch Customer					
[A]		[B]	[C]	[D]	
Line No.	Gallons Consumption	Present Rates	Proposed Rates	Percent Increase	
1					
2	-	\$ 8.00	\$ 11.62	45.2%	
3	1,000	\$ 10.94	\$ 14.56	33.1%	
4	2,000	\$ 13.88	\$ 17.50	26.1%	
5	3,000	\$ 16.82	\$ 20.44	21.5%	
6	4,000	\$ 19.76	\$ 23.38	18.3%	
7	5,000	\$ 23.92	\$ 27.55	15.2%	
8	6,000	\$ 28.08	\$ 31.71	12.9%	
9	7,000	\$ 32.24	\$ 35.87	11.3%	
10	8,000	\$ 36.40	\$ 40.03	10.0%	
11	9,000	\$ 40.56	\$ 44.19	9.0%	
12	10,000	\$ 44.72	\$ 48.36	8.1%	
13	11,000	\$ 48.88	\$ 52.52	7.4%	
14	12,000	\$ 53.04	\$ 56.68	6.9%	
15	13,000	\$ 57.20	\$ 60.84	6.4%	
16	14,000	\$ 57.20	\$ 60.84	6.4%	
17	15,000	\$ 57.20	\$ 60.84	6.4%	
18	16,000	\$ 57.20	\$ 60.84	6.4%	
19	17,000	\$ 57.20	\$ 60.84	6.4%	
20	18,000	\$ 57.20	\$ 60.84	6.4%	
21	19,000	\$ 57.20	\$ 60.84	6.4%	
22	20,000	\$ 57.20	\$ 60.84	6.4%	
23	21,000	\$ 57.20	\$ 60.84	6.4%	
24	22,000	\$ 57.20	\$ 60.84	6.4%	
25	23,000	\$ 57.20	\$ 60.84	6.4%	
26	24,000	\$ 57.20	\$ 60.84	6.4%	
27	25,000	\$ 57.20	\$ 60.84	6.4%	
28					
29					
30	Average Residential Consumption				
31	Average Residential Bill	\$ 45.30	\$ 48.94	8.0%	\$ 3.64
32					
33	Monthly Minimum Rate	\$ 8.00	11.62	45.2%	\$ 3.62
34	Commodity Rate 0 to 6,000 gallons	2.940	2.9419	0.065%	\$ 0.0019
35	Commodity Rate 6,001 gallons and over	4.160	4.1619	0.046%	
36					